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ABSTRACT

This guide for implementing the Vocational Education for Special Populations (ESP) Planning System is designed to assist states in modifying their planning procedures to be more responsive to the needs of special populations. Chapter 1 briefly describes the historical evolution of the concern for those with special needs and the emergence of planning as a rational approach to allocation of resources. The merger of these themes in present vocational education legislation is also discussed, and finally, the organizing framework of the planning model is presented. Chapter 2 presents the self-assessment guide which parallels the criteria contained in the Office of Education's Management Evaluation Review for Quality (MERQ) process. The procedures presented in chapters 3 through 8 are organized around the following six topical areas which categorize the evaluation criteria used in the MERQ assessment of state planning: policy development; needs assessment; goal formation; development of objectives; identification of programs, services, and activities to meet objectives; and allocation of resources. The planning procedures presented are generic to the extent that they do not focus on particular special populations, but rather they can be applied to any special population(s) of concern to the state. (BM)

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Vocational E.S.P. Planning System

Planning Vocational Education for Special Populations

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INTRODUCTION

PLANNING & SPECIAL POPULATIONS - perhaps the two most pervasive influences on contemporary vocational education. Yet despite the saliency of these themes, there is a scarcity of readily available information describing how to plan for the delivery of services to special populations. The lack of available information inhibits modifications in planning efforts which would result in improvements in the effectiveness of the vocational education delivery system in serving special populations. It is the purpose of this document to provide State vocational education agencies with a flexible planning system which they can use to assess and modify their planning procedures to better meet the needs of special populations.

In order to provide a context for the consideration of planning for special populations, a brief account is provided of the historical evolution of the concern for those with special needs and the emergence of planning as a rational approach to allocation of resources. The merger of these themes in the present vocational education legislation is discussed and a planning model presented as an organizing framework.

Concern for Special Populations

In the early 1960's there emerged a groundswell of concern that large segments of the society were being systematically denied their rights to participate in the mainstream benefits of society. This concern culminated in the passage of a host of special legislation for the attainment of social and economic equity. A cornerstone of the legislative architecture for social equality was the Civil Rights Act of 1964 [PL 88-352], of which Title VI prohibited exclusion from Federally funded programs solely on the basis of race, color, or national origin.

The concern for social justice also found expression in the passage of the Vocational Education Act of 1963. This Act was based on the recommendations of the Panel of Consultants appointed by President John F. Kennedy to review and evaluate vocational education's responsiveness to social needs. During the course of their deliberation, the Panel of Consultants cited the lack of responsiveness to the various needs of persons with special difficulties as a major failure of vocational education. In reaction to this admonition, Congress made explicit its intent that vocational education provide for persons with "academic, socioeconomic or other handicaps that prevent them from succeeding in regular vocational education programs" [PL 88-210, Sec. 4(c)]. In the preamble of the Act, Congress also declared that vocational education should be realistic in terms of employment opportunities and suited to the needs, interests, and abilities of those with educational handicaps. A ten percent set-aside was authorized to assist those individuals through experimental, developmental or pilot programs.

The Vocational Education Act of 1963 established a National Advisory Council on Vocational Education and charged it, among other things, with the responsibility of assessing the changes that occurred as a result of the Act. With regard to providing suitable training to students with special needs, the Council concluded that there was " . . . little evidence that . . . (this) major purpose has been accomplished so far" (National Advisory Council on Vocational Education, 1968). In fact, their inquiries led them to state that it had " . . . hardly been touched." Their charge was tempered, however, by an acknowledgement that there had not been sufficient time to allow for full implementation of the Act.

The Advisory Council's early report echoed the newly acclaimed ideals of society for equal access to employment and educational opportunities. It argued for the reduction or elimination of barriers caused by ignorance, poverty, disease and discrimination through effective education and occupational training. These same concerns were concurrently voiced by various advocacy groups for the handicapped, racial minorities, women, and the educationally and socioeconomically disadvantaged.

Responding to those appeals, Congress enacted the Vocational Education Amendments of 1968 [PL 90-576]. With regard to special populations, the Amendments provided Federal support on a matching basis with minimum State set-aside requirements of 10 percent of the Part B monies for the handicapped and 15 percent for the academically or socioeconomically disadvantaged. Further incentives of up to 100

percent of costs were provided under a separate categorical authorization for exemplary programs and projects for the disadvantaged. The Amendments were subsequently expanded in 1974 [PL 93-380] to include the provision of bilingual programs for those with limited English-speaking abilities.

In further recognition of the unique needs of the handicapped, Congress passed the Education of the Handicapped Act of 1971 [PL 91-230], the Rehabilitation Act of 1973 [PL 93-112], and the Education of the Handicapped Act as amended in 1975 [PL 94-142]. The Education of the Handicapped Act of 1971 authorized the provision of funds for the construction of facilities and the acquisition of equipment necessary for improved educational services for the handicapped. States were given support under Part B for the initiation, expansion and improvement of programs for the education of the handicapped. The Rehabilitation Act of 1973 had a more pervasive and global effect with respect to the handicapped. Title V of the Act contained two sections that expanded the basic rights of all handicapped individuals. Section 503 required that businesses with Federal contracts of more than \$2,500 must take affirmative action to hire qualified handicapped persons. Executive Order 11246 as amended by 11375 subsequently extended the coverage by requiring that businesses with Federal contracts of more than \$50,000 which employed 50 or more persons were required to develop and implement affirmative action plans. Section 504 of the Act prohibited discrimination against handicapped persons in all programs receiving Federal assistance. The Education of the Handicapped Act as amended in 1975 provided that all handicapped children are entitled to a free public education with special services as appropriate to meet their needs.

In the 1970's, society's attention turned to the special needs of women. The impetus of the women's equality movement heightened society's awareness of the existence of long-standing sex bias and discrimination. During the year 1972, two significant pieces of legislation were passed aimed at the eradication of sex bias, sex discrimination and sex stereotyping. Title VII, enacted as an amendment to the Civil Rights Act, prohibited discrimination against employees on the basis of race, color, religion, sex or national origin. Title IX of the Education Amendments of 1972 [PL 92-318] prohibited discrimination on the basis of sex against students and employees of education agencies receiving Federal funds and covered such areas as admission and recruitment, the provision of any benefits or special services, the provision of financial aid, and any conditions of employment.

As indicated by the evolving course of social concern, those segments of society deemed "special" tend to shift over time. Whereas racial discrimination and economic opportunity were the central concerns of the sixties, they have been broadened during the seventies to include discrimination against the handicapped, sex discrimination, and equal access to quality educational opportunities. Historically, the determination of what segments of society were considered as having special needs has been significantly influenced by the presence of advocacy groups representing their interests. It is not unreasonable to assume that as other segments develop advocacy support, social awareness of their causes will increase and they, too, will move into the "special" category.

Therefore, it appears unrealistic to define special populations simply by a listing of those groups that are currently the focus of political and societal attention. If policies and procedures were to be based on a litany of such special needs groups, they would require frequent revision to avoid being outdated. What is required instead is a specification of the necessary and sufficient conditions of "specialness."

These conditions center on the opportunity to succeed. With respect to vocational education, a special needs population represents any significant segment of society that has been systematically denied the opportunity to participate in or succeed in regular vocational education programs. Individuals may be denied opportunity to succeed in a vocational program for a variety of reasons. When a significant number of those being denied share common demographic characteristics, that group of individuals is ascribed the status of a special population, and the population comes to be identified by the predominant demographic characteristics held in common. Systematic denial of opportunity to succeed implies that there are certain structural elements of the vocational education system that interact with the demographic characteristics of special populations to restrict access to and/or reduce chances of successful program completion in comparison with the general population.

Congress proclaimed in the 1968 Amendments and reaffirmed in the 1976 Amendments the egalitarian principle that vocational education is for "all" people. Taken literally, this implies that no person regardless of his or her limitations should be denied access to quality vocational education because of reasons beyond his or her personal control. In recognition of this right of all people to participate in programs suited to their needs and abilities,

Congress provided that those persons who cannot succeed in regular programs because of social, psychological or physical deprivations must be provided with the special assistance they need to succeed in regular programs or be provided special programs tailored to their unique needs.

Thus, it is incumbent upon vocational education to pursue innovative action to overcome barriers blocking equal access to educational opportunities and to promote inclusion of those heretofore excluded. Elimination of barriers and the creation of a climate of inclusion will require a concerted effort directed at organizational change. The success of this effort will be critically dependent upon the capability of vocational education to plan for the provision of services to those whose needs make them special.

Planning — The Guiding Force

The roots of planning are deeply embedded in the history of vocational education. The Smith-Hughes Act [PL 64-347], in authorizing Federal support for vocational education, required that States receiving assistance submit an annual plan governing the expenditures of Federal funds. The Vocational Education Act of 1963, by expanding the activities approved for Federal support and the populations to be served, placed increased importance on planning as a rational means of allocating scarce resources to satisfy the often diverse needs of a growing constituency. The press for greater inclusiveness of those to be served and the extended latitude in the use of Federal funds was even more pronounced in the 1968 Amendments. States receiving Federal support were required to submit a five-year as well as an annual plan. Expectations as to content were made more explicit. In recognition of the added requirements and as an incentive to promote improved planning, States were authorized to use Federal funds to support planning activities.

Congressional reliance on planning reached new heights in the Education Amendments of 1976 [PL 94-482]. The primary purpose of Federal support for vocational education was declared to be:

to assist States in improving planning in the use of all resources available to them for vocational education and manpower training by involving a wide range of agencies and individuals concerned with education and learning within the States in the development of vocational education plans (Title I - Vocational Education, Sec. 101).

The role of planning shifted from the previous considerations as principally a means of allocating resources to a concern for planning as a participatory process. To promote increased involvement, the planning process was prescribed in terms of the organizations and agencies to be represented and the procedures to be followed in the development of five-year and annual plans. Public participation in the planning process was to be accomplished through membership on State and local advisory councils and by public hearings.

An idealized sequence of planning activities was mandated for the preparation of State plans. The five-year plan is to be based on an assessment of current and projected employment requirements within the State. Goals for meeting the identified current and projected employment requirements are to be explicitly formulated. Vocational programs and services or other supportive activities for achieving those goals are to be identified, program enrollment targets established, and responsibilities for program offerings assigned to secondary, postsecondary and adult levels of education among the various educational institutions within the State. Allocation of local, State and Federal funds to programs and training opportunities, education levels and institutions are to be described and reasons provided for the proposed assignment of programs and allocation of financial resources. Annual plans are to be prepared as a means of updating the five-year plan. They are to show the planned programmatic uses of funds for that fiscal year and to provide reasons for any deviation from the uses described in the five-year plan.

Planning for special populations is given specific attention. States, in the preparation of their five-year plans, are to set forth the explicit uses of Federal funds for meeting the special needs of the handicapped, the disadvantaged, and those with limited English-speaking abilities. Policies and procedures which assure equal access to vocational education for both women and men are to be described and are to include the incentives to be provided to encourage enrollment of the under-represented sex in non-traditional courses. Procedures and programs are to be set forth for assessing and serving the needs of displaced homemakers,

single heads of households, persons working part-time who desire full-time work and those who seek employment in jobs traditionally held by members of the opposite sex.

Planning for Special Populations — An Additional Dimension

Federal legislation has charged vocational education with the dual responsibility of serving the society at large while also responding to the vocational educational needs and desires of its individual members. This oftentimes conflicting mandate has been operationalized into two major indicators of need which guide vocational education planning: estimated occupational employment required to sustain an anticipated level of economic activity, and student demand for programs as evidenced by the number of individuals expected to enroll in vocational education programs. In essence, the planning of vocational education programs serves to coordinate program offerings in light of anticipated employment opportunities and student preference for vocational programs. Depending upon the philosophical position to view vocational education as having primary responsibility to be responsive to labor market needs or to student demand for programs, these two factors have been weighted differentially in decisions to alter the mix of vocational programs. Although divergent opinions exist as to their relative importance, there is general consensus that these two factors should serve to guide the planning of vocational education programs.

While appropriate for the planning of program offerings, emphasis on these two measures appears inadequate when planning for populations whose "specialness" results from their restricted access to or inability to succeed in regular vocational programs without special assistance. A new dimension must be considered in the planning process. Special populations' needs cannot be equated with student demand for vocational programs, since many of their needs are for system modifications or support services which will enable them to enroll and succeed in vocational education programs. Barriers restricting access to programs -- whether they be architectural, geographical, attitudinal, financial or academic -- can result in a reduction in enrollments which might be misinterpreted as a decline in student demand for programs rather than as a causal factor inhibiting student enrollments. Likewise, low

completion rates might be attributed to lack of student interest or motivation rather than to factors which preclude students with special needs from completing their educational programs. Thus in planning vocational education for special populations it is necessary to go beyond striking a balance between projected labor market needs and program enrollments/completions, and to focus instead upon identifying and overcoming the barriers which prevent special populations from enrolling or succeeding in the existing vocational education system. Because of the diversity of barriers and the multiplicity of ways in which barriers can differentially affect various special populations, the conditions to be dealt with are considerably more complex in special needs planning than in regular program planning.

The increased complexity calls for a greater variety of action alternatives. New courses of action must be charted to bring special populations into the mainstream of vocational education and to overcome the accumulated effects of longstanding biases or disadvantage. The resources and expertise necessary to meet the needs of special populations may well exceed the conventional boundaries of vocational education and require the coordinated involvement and investment of multiple service providers. The role which vocational education can play to meet the needs of special populations will need to be clarified, and action alternatives considered in light of that role and available resources.

Planning for special populations requires the incorporation of a new dimension in vocational education planning; it requires an emphasis on support services and system modifications necessary to enable special populations to succeed in vocational programs. Where planning does not consider these needs, there will be a perpetuation of special populations who are denied the benefit of acquiring vocational skills and thereby denied the opportunity to enter meaningful and productive careers in the labor force.

The Vocational E.S.P. Planning System is designed to assist the States in modifying their planning procedures to be more responsive to the needs of special populations. It is a flexible system which was developed with an awareness of the diversity which exists among the States' needs and resources. For that reason, the planning procedures presented in the System are generic to the extent that they do not focus on particular special populations, but rather they can be applied to any special population(s) of concern to the State.

MERQ: The Organizing Framework

The E.S.P. Planning System is structured according to the conceptualization of the planning process utilized by the Office of Education in its Management Evaluation Review for Quality (MERQ) in State-level planning for vocational education. The MERQ is an ongoing assessment conducted by the Bureau of Occupational and Adult Education to determine State vocational education strengths and weaknesses as required by Sec 112(a)(2) of the Vocational Education Act as amended [PL 94-482]. The evaluative criteria used in the MERQ assessment of State planning are categorized into six topical areas:

- policy development
- needs assessment
- goal formulation
- development of objectives
- identification of programs, services and activities to meet objectives
- allocation of resources.

It is around these topical areas or functional planning components that the planning system is organized.

This policy development component of the E.S.P. System (Chapter 3) focuses on procedures for the formulation, adoption, and dissemination of policies pertaining to vocational education for special populations. As used in this context, policies are defined as formal statements of intent promulgated by a State Board of Education for the purposes of guiding and directing State and local educational agencies in providing vocational education and related services to special populations.

Needs assessment (Chapter 4) encompasses a variety of procedures intended to identify the aggregate needs of one or more special populations as they relate to vocational education. The purpose of these needs assessments is to guide subsequent planning activities; especially goal development, formulation of objectives, and the identification of programs, services and other activities for promoting the attainment of objectives. Thus needs assessment, as described in the E.S.P. System, does not include the collection of information for the purpose of developing individualized plans for special needs students.

Through goal formulation (Chapter 5), the results of the needs assessment are converted into targetable goals which provide direction for subsequent planning activities in order to close the gap between "what is" and "what ought to be" concerning the delivery of services to special populations. Once those directions are determined, objectives are developed (Chapter 6) which serve to quantify the outcome conditions that should be achieved in order to remedy discrepancies between existing and desired states. The distinction between goals and objectives is largely one of specificity; goals tending to be more global, long-term, and less subject to direct measurement or evaluation than is the case with objectives. Thus, in deriving objectives for each of the goals, the education agency classified the long- and short-term results which it hopes to achieve to better meet the needs of its special populations.

Following the development of objectives, it is necessary to identify the programs, services and activities which will lead to the attainment of objectives (Chapter 7). At this stage in the planning process, the focus shifts from desired outcomes (i.e., goals and objectives) to processes for achieving those outcomes; in other words, from what is to be accomplished to how it is to be accomplished. Programs, services and activities therefore represent the strategies which are intended to facilitate the attainment of objectives targeted at special populations.

The final component of the planning process -- as conceptualized in the MERQ and as described in the E.S.P. System -- concentrates on the allocation of resources to support the various programs, services and activities necessary for the attainment of objectives (Chapter 8). At this stage in the planning process, the State commits its funds to support those programs, services and activities which will have the greatest impact upon improving the delivery of services to special populations.

While the E.S.P. Planning System parallels the planning components of the MERQ, the similarity between the two goes beyond the continuity of their components. To further the relationship between the E.S.P. Planning System and the MERQ, the E.S.P. System utilizes a self-assessment process whereby an education agency can conduct its own MERQ to identify specific planning activities in need of strengthening. Criteria included in the E.S.P. self-assessment guide are derived from the MERQ but have been adapted to focus more specifically on planning for special populations. For example, whereas one of the MERQ criteria is that "The State Board has formally

adopted an overall policy on vocational education," the corresponding E.S.P. criterion contained within the self-assessment guide is that "An overall policy has been formulated and adopted concerning the role of vocational education in serving special populations." The self-assessment process is thereby designed to enable users to focus their efforts on specific planning activities in greatest need of strengthening; thus, the system does not have to be adopted in toto by an education agency in order to be of benefit to it.

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SELF-ASSESSMENT PROCEDURES

The E.S.P. Planning System is designed to be used in conjunction with a self-assessment procedure. As noted in the introduction to the system, the self-assessment guide is an adaptation of the criteria contained in the BOAE Management Evaluation Review for Quality (MERQ) in planning, but focuses more specifically upon planning for special populations. By reviewing those criteria as part of a self-assessment process, the State agency can identify the specific aspects of its planning procedures which are in greatest need of strengthening.

The Self-Assessment Guide

The self-assessment guide is structured around the six components of the MERQ planning process, i.e., policy development, needs assessment, goal development, development of objectives, identification of programs, services, and resource allocation. Each component is described in terms of the Key Activities necessary for full implementation of the component. These Key Activities represent the activities which are considered to be fundamental in the planning process as conceptualized in the 1976 Vocational Education Amendments [PL 94-482] and the MERQ guide for BOAE evaluation of State-level planning. The Key Activities also serve as the linkage between the self-assessment process and the descriptions of alternative planning procedures contained in Chapters III-VIII of the E.P.S. Planning System.

In addition to the Key Activities contained within the self-assessment guide, two other categories of criteria are included for State review during the self-assessment: (1) Characteristics of the Process, and (2) Characteristics of the Products. While not linked into the subsequent chapters of the Planning System, these characteristics have been included in the self-assessment guide because they

reflect additional criteria contained within the MERQ which the State should be aware of when conducting its self-assessment. Characteristics of the Process represent procedural variables for implementing the planning procedures. Characteristics of the Products, on the other hand, describe important structural features which should be considered when assessing the existing products of the State's planning procedures and when developing such products in the future. An example of each of these three considerations is presented below; again, it should be pointed out that subsequent chapters of the E.S.P. Planning System focus only upon alternative procedures for implementing the Key Activities.

Key Activity: An overall policy has been formulated and adopted concerning the role of vocational education in serving special populations.

Characteristic of the Process: Policy on vocational education for special populations has been cooperatively developed by the boards governing secondary and postsecondary vocational education.

Characteristic of the Product: The policy describes the philosophical intent of vocational education in providing services to special populations.

As evidenced by the above example, the Key Activity is of paramount importance since it entails the development of policy. Without the development of policy, the two Characteristics are of no significance since there is neither a policy development process nor policy to apply them to.

As implied by its title, the self-assessment guide is intended for use by State agency staff to review its current planning procedures relative to the criteria contained within the guide. While each item or component can be reviewed separately, it is recommended that the entire planning process be reviewed prior to initiating any changes. Such an approach is recommended for two reasons: (1) there are relationships between components which make the completion of some activities dependent upon the prior completion of other activities, and (2) time or resource limitations may require the State agency to concentrate its efforts on those components or activities which are in greatest need of strengthening or which can be strengthened with a minimum expenditure of time and resources.

Conducting a Self-Assessment

A State vocational education agency which is interested in conducting a self-assessment using the guide should seek the involvement of those members of the SVEA staff who are most familiar with the topical areas addressed in the guide. Once the decision has been made to conduct the self-assessment, responsibility for completion of the various items within the guide will need to be assigned to those individuals most closely concerned with the topical areas. For many of the items contained within the guide, it will be advantageous to assign more than one individual the responsibility of reviewing the item and responding to it. By doing so, differences of opinion can be identified and the reasons for those differences subsequently explored.

During their independent review of items, the individuals should not seek to rate each item. Rather, they should make notes on their guides concerning the factors which they believe to be most pertinent with regard to the items which they have been assigned. Following these independent reviews, the individuals involved should be convened as a group to go over their notes and opinions concerning the agency's performance relative to each of the Key Activities.

Through a group process, each of the Key Activities should be assigned a rating which reflects the group's assessment of the extent to which the Key Activity corresponds with the existing situation in the State agency. The following legend can be used when assigning ratings to the Key Activities:

2 = Accurately describes the existing situation

1 = Partially describes the existing situation

0 = Does not describe the existing situation.

In arriving at the most appropriate rating for a Key Activity, the group should also consider the information presented as Characteristics of the Process and Characteristics of the Products. Those Characteristics will help to clarify the intent of the Key Activity, should it be necessary.

Upon completion of the assignment of ratings to each of the Key Activities, the group should focus its attention on those Key Activities which were assigned ratings of zero

(0), since they will represent planning activities in greatest need of strengthening. The structure of the planning system reflects a sequential planning process, beginning with policy development and ending in the allocation of funds. Therefore, it is advisable to review the ratings following the same sequence in which they are presented in the self-assessment guide. In this manner, the State will automatically answer the question "Where should we begin?"

Locating and Selecting Planning Procedures

To facilitate locating information pertaining to the Key Activities contained in the self-assessment guide, chapter and page references are cited in parentheses following each Key Activity. For each Key Activity, at least two alternative procedures for performing the Activity are presented in the appropriate chapter and section of the Planning System. Each alternative procedure is first briefly described by an overview, followed by a delineation of considerations which should be reviewed by the agency staff prior to reviewing the more detailed description of the alternative. Finally, a step-by-step description of each alternative is presented for staff consideration in making its selection of the alternative which is most compatible with agency needs and resources.

While structured as a complete planning system, the E.S.P. System does not have to be completely adopted by the State agency in order to be of use to it. Each description of an alternative planning procedure can be reviewed alone if the agency has a particular need for information pertaining to such a procedure. For example, if the State is about to commence a needs assessment, a review of the information provided in the chapter on needs assessment (Chapter 4) might provide helpful advice which can be incorporated into the previously planned needs assessment. Likewise, the procedures contained within the System are not intended to be structured so rigidly that they cannot be modified to better meet the particular needs of a State. If a modification of a procedure would make it of greater value to the State, then the procedure should be modified accordingly.

SELF-ASSESSMENT GUIDE

RATING LEGEND:

2 = Accurately describes the existing situation

1 = Partially describes the existing situation

0 = Does not describe the existing situation

SELF-ASSESSMENT GUIDE

Policy Development

Key Activities

Rating

- | | |
|--|-------|
| 1. An overall policy has been formulated and adopted concerning the role of vocational education in serving special populations. (III-7) | _____ |
| 2. The policy is published by the State and routinely distributed to local educational agencies, interested organizations and the general public. (III-53) | _____ |

Characteristics of the Process

1. Procedures used to formulate policy for special populations provide for the involvement of governmental and non-governmental organizations and groups such as:
 - A. Secondary and postsecondary LEA staff
 - B. Secondary and postsecondary State agency staff
 - C. Special population advocacy groups
 - D. Vocational Rehabilitation
 - E. Special Education
 - F. Students and parents
 - G. Corrections
 - H. State and local vocational education advisory councils
 - I. Employer groups
 - J. Labor organizations
 - K. State employment agency
2. Policy on vocational education for special populations has been cooperatively developed by the Boards governing secondary and postsecondary vocational education.

Characteristics of the Products

1. The policy describes the philosophical intent of vocational education in providing services to special populations.
2. The policy identifies the mission or purpose of vocational education with respect to specific target groups such as:
 - A. Handicapped persons
 - B. Disadvantaged persons
 - C. Persons of limited English-speaking ability
 - D. Women who are entering or re-entering the labor force
 - E. Correctional inmates
3. The policy clearly describes the roles of various governmental and non-governmental organizations in the planning of vocational education for special populations. These organizations might include:
 - A. Secondary State and local education agencies
 - B. Postsecondary State and local education agencies
 - C. State and local vocational education advisory councils
 - D. Vocational Rehabilitation
 - E. CETA prime sponsors
 - F. Corrections
 - G. Advocacy groups
 - H. Employer groups
 - I. Labor organizations
4. The policy defines the delivery system in terms of the roles of various types of agencies and organizations in the provision of vocational education and supportive services to special populations.
5. The policy is sufficiently succinct and definitive to provide a basis for decisions regarding the allocation of resources for services to special populations.

Needs Assessment

Key Activities

Rating

1. The State agency periodically conducts statewide sample surveys to determine general perceptions of the needs of special populations. (IV-5) _____
2. The State agency periodically conducts surveys of students or school personnel to determine the needs of special populations enrolled in school. (IV-39) _____
3. Available socio-economic and demographic data are analyzed in order to identify special populations in need of vocational education programs and support services. (IV-63) _____

Characteristics of the Process

1. Educational and occupational needs and desires are identified for a variety of special populations such as:
 - A. Handicapped persons
 - B. Disadvantaged persons
 - C. Limited English-speaking persons
 - D. Displaced homemakers
 - E. Single heads of households who lack adequate job skills
 - F. Homemakers who work part-time but seek full-time employment
 - G. Those who seek employment in jobs not traditionally held by members of their sex
 - H. Inmates in correctional institutions

Characteristics of the Products

1. The results of the needs assessment are presented in a format which facilitates goal development and future decision-making.

Goal Development

Key Activities

Rating

1. The State agency has an established procedure(s) for the formulation of statewide goals based on analyses of special population needs and barriers restricting their access to vocational education. (V-5) _____
2. Preliminary goals are reviewed by groups external to the State vocational agency such as: _____
 - A. Other State agencies
 - B. Local educational agencies
 - C. Consumer/advocacy groups
 - D. State and local advisory councils
 - E. General public
 - F. Labor organizations (V-49)
3. Goals are prioritized by a procedure that takes into consideration such factors as: _____
 - A. Input from local educational agencies and institutions
 - B. National priorities concerning special populations
 - C. Input from the general public
 - D. Input from consumer/advocacy groups (V-69)
4. Statewide goals relating to special populations are published and widely disseminated. (V-89) _____

Characteristics of the Process

1. National issues and priorities concerning special populations are reviewed during the goal development process.
2. In formulating statewide goals for special populations the State agency coordinates its efforts with other agencies involved in the delivery of services to special populations.
3. In formulating statewide goals for special populations, the State agency solicits input from local educational agencies and institutions.

Characteristics of the Products

1. Goals for special populations are consistent and compatible with each other and with the overall role and mission of vocational education within the State.
2. Goals for special populations appear to be appropriate and realistic in light of:
 - A. Documented needs of special populations
 - B. Historical trends in serving special populations
 - C. Available resources
 - D. Barriers restricting the access of target groups
3. Formulated goal statements designate the target group(s) to be served, what is to be accomplished and the purpose or intent of the goal.
4. Goal statements contain an estimated time frame for attainment or are classified as long-range or short-range goals.
5. Goals for special populations are stated in such a manner that they:
 - A. Are understandable by the general public
 - B. Provide direction to the planning and administration of vocational education and support services at both the State and local levels
 - C. Clearly express the intentions of the State vocational education agency

Development of Objectives

Key Activities

Rating

1. The State agency has an established procedure(s) for the formulation of objectives based on previously established goals for special populations. (VI-7) _____
2. Objectives are reviewed by groups external to the State vocational education agency such as: _____
 - A. Other State agencies serving special populations
 - B. Local educational agencies and institutions
 - C. Consumer/advocacy groups
 - D. General public
 - E. Labor organizations (VI-47)
3. Statewide objectives pertaining to the delivery of services to special populations are published and widely disseminated. (VI-67) _____

Characteristics of Products

1. Objectives are consistent and compatible with each other.
2. Objectives are necessary in order to achieve goals; i.e., no superfluous objectives have been included.
3. Objectives are sufficient for goal attainment; i.e., no important objective(s) has been omitted.

4. Objectives are stated in measurable performance terms that lend themselves to specific determination of the extent to which they are achieved.
5. Objectives contain a time frame for their attainment.
6. Objectives appear appropriate and realistic in light of:
 - A. Documented needs of special populations
 - B. Resources available for serving special populations
 - C. Barriers inhibiting the success of special populations
 - D. Current levels of attainment

Identification of Programs, Services and Activities

Key Activities

Rating

1. Alternative programs, services and activities are identified and compared relative to their potential for attaining stated objectives. (VII-7)

Characteristics of the Process

1. Programs, services and activities are identified with the cooperation of other agencies such as:
 - A. Secondary/postsecondary State vocational education agencies
 - B. Vocational Rehabilitation
 - C. Corrections
 - D. Special Education
 - E. Local vocational education agencies or institutions
 - F. CETA prime sponsors
 - G. Labor organizations
2. The procedure used to identify potential programs, services and activities for serving special populations takes into consideration such factors as:
 - A. Relative costs of alternatives
 - B. Evidence of previous effectiveness
 - C. Availability of similar programs, services or activities through other delivery systems
3. Responsibility for the delivery of programs, services and activities is allocated to educational levels and types of institutions on the basis of such factors as:
 - A. Characteristics of the target populations to be served
 - B. Comparative costs
 - C. Availability of necessary facilities, personnel and supportive resources to ensure desired results
 - D. Extent to which institutional goals, objectives and activities are consistent with those which the State has identified and intended for special populations

Characteristics of Products

1. Programs, services and activities which are intended to assist special populations are detailed for each objective.
2. The programs, services and activities associated with each objective appear necessary and sufficient for attaining the objective.

Resource Allocation

Key Activities

Rating

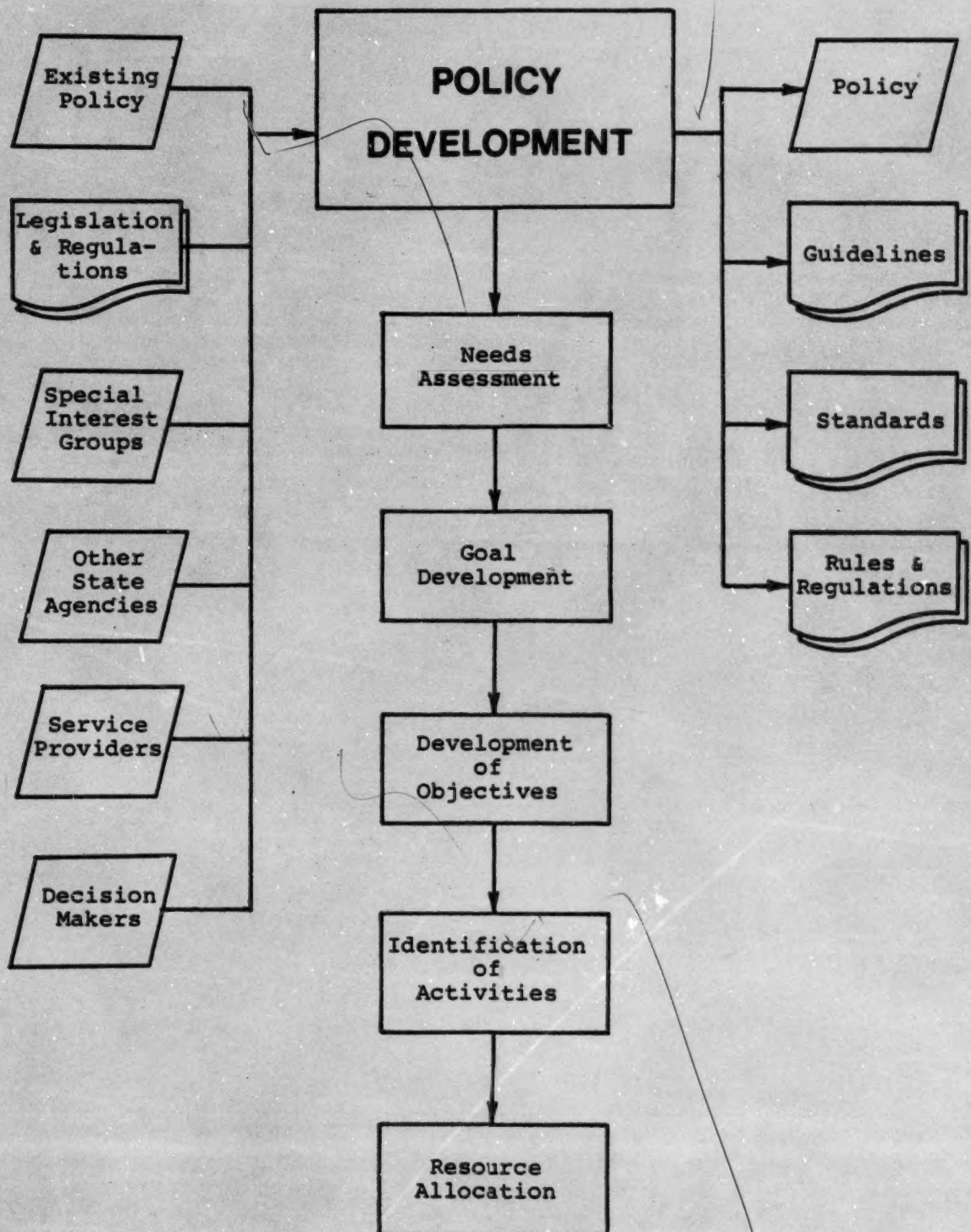
1. The State agency utilizes well-defined procedures for the review of local applications for funds to serve special needs populations. (VIII-5)
2. The State agency utilizes well-defined procedures for the prioritization of local applications for funds to serve special needs populations. (VIII-35)
3. The State agency utilizes well-defined procedures for determining the distribution of Federal funds to eligible recipients to support special needs programs, services and activities. (VIII-51)

Characteristics of the Process

1. Data which are used in the allocation formula reflect the current incidence and geographic distribution of special populations.
2. Eligible recipients are provided with information on the types of programs, services and activities for special populations which should be given priority consideration in the development of local plans and applications.
3. Eligible recipients are required to identify the relationship between their proposed activities directed at special populations and those programs, services and activities which will be supported by the State vocational education agency.

CHAPTER THREE
POLICY DEVELOPMENT

CHAPTER THREE



POLICY DEVELOPMENT

This chapter of the Vocational E.S.P. Planning System contains alternative procedures for developing state-wide policies for special populations. As defined in this system, policies are formal statements of intent initiated by a State board of education. They exist for the purpose of guiding and directing the action of educational agencies in carrying out State board intent. As the first component of the planning process, policy represents the foundation upon which a plan is based. The quality of a plan and resultant products is not likely to exceed the quality of the policy.

This component of the planning system contains two key activities.

<u>Key Activity</u>	<u>Page</u>
1. Policy Formulation	7
2. Dissemination of Policies	53

During the process of formulating, adopting and disseminating policies, there are a number of factors that should be taken into account which would enhance the procedures presented in this chapter. They are presented below as "characteristics of the process" and "characteristics of the product."

Characteristics of the Process

1. Procedures used to formulate policy for special populations provide for the involvement of governmental and non-governmental organizations and groups such as:

- Secondary and postsecondary LEA staff
 - Secondary and postsecondary State agency staff
 - Special population advocacy groups
 - Vocational Rehabilitation
 - Special Education
 - Students and parents
 - Corrections
 - State and local vocational education advisory councils
 - Employer groups
 - Labor organizations
 - State employment agency
2. Policy on vocational education for special populations has been cooperatively developed by the Boards governing secondary and postsecondary vocational education.

Characteristics of the Products

1. The policy describes the philosophical intent of vocational education in providing services to special populations.
2. The policy identifies the mission or purpose of vocational education with respect to specific target groups such as:
 - Handicapped persons
 - Disadvantaged persons
 - Persons of limited English-speaking ability
 - Women who are entering or re-entering the labor force
 - Correctional inmates
3. The policy clearly describes the roles of various governmental and non-governmental organizations in the planning of vocational education for special populations. These organizations might include:
 - Secondary State and local education agencies
 - Postsecondary State and local education agencies
 - State and local vocational education advisory councils
 - Vocational Rehabilitation
 - CETA prime sponsors
 - Corrections

- Advocacy groups
 - Employer groups
 - Labor organizations
4. The policy defines the delivery system in terms of the roles of various types of agencies and organizations in the provision of vocational education and supportive services to special populations.
 5. The policy is sufficiently succinct and definitive to provide a basis for decisions regarding the allocation of resources for services to special populations.

SECTION 1

POLICY FORMULATION

POLICY FORMULATION

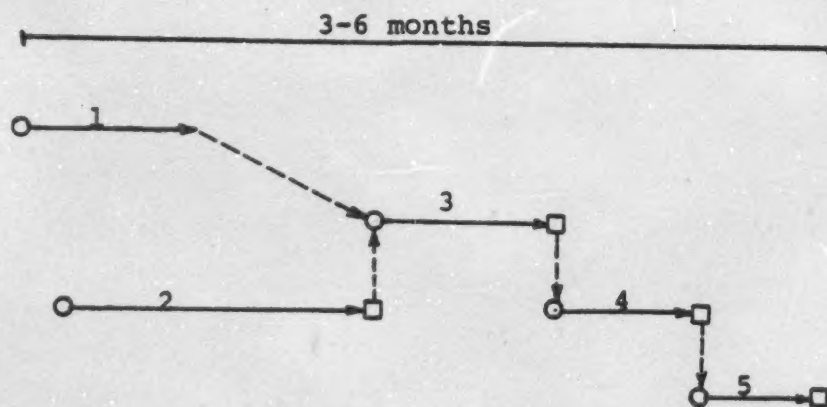
Three generic procedures for the formulation and adoption of State board policy are presented in this section. The first alternative describes a centralized approach to policy development. In this approach, the State education agency plays a central role in the formulation of policy options for consideration and final adoption by the State board. The second alternative presents a decentralized approach to policy development. In this approach, the locus of responsibility for policy formulation is decentralized with the State Education agency acting primarily as a facilitator and recorder for the purpose of translating group consensus into policy options. The third approach is a mixed decentralized-centralized approach with the State education agency seeking input from local constituencies and then formulating policy options for State board approval based on these inputs.

<u>Procedure</u>	<u>Page</u>
Centralized Policy Formation	
overview	9
key considerations	10
implementation steps	12
for additional information	23
Decentralized Policy Formation	
overview	25
key considerations	26
implementation steps	28
Mixed Central-Decentralized Policy Formulation	
overview	39
key considerations	40
implementation steps	42

CENTRALIZED POLICY FORMULATION

CENTRALIZED POLICY FORMULATION

LEGEND: ○ START POINT — ACTIVITY □ OUTCOME - - - - - CONSTRAINT



Steps:

1. Assess Existing Policies
2. Establish Support for Policy Development Efforts
3. Formulate Policy Alternatives
4. Recommend Policy Option
5. Document Adopted Policy

OVERVIEW

This alternative presents a centralized approach to policy formulation, with State agency personnel playing a lead role in the policy formulation process. State agency personnel facilitate the policy development process by assisting State board policy-makers in the identification of the need for policy development, formulation of alternative policy options and adoption of a policy as a desirable course of action. The procedure provides for an analysis of existing policies and a determination of the extent to which existing policies are capable of meeting anticipated problems to be encountered in improving the vocational education programs and services to special populations. In recognition that, by definition, only State board makes policy, suggested procedures are offered for (1) identifying key individuals and groups whose support is needed, (2) obtaining their support and (3) using evidence to argue for the adoption of specific policy options.

KEY CONSIDERATIONS

The principal costs are those associated with professional personnel. Depending on the number of special population groups considered and the number of policy statements assessed, this procedure should require from 20 to 40 person days of educational professional effort. Actual costs will depend upon the number and salaries of the vocational education professionals assigned.	COST
Implementation of the procedure requires professional staff who are oriented to policy issues surrounding the provision of vocational education to special populations, familiar with the decision-making mechanisms used in the vocational education agency and sensitive to the need to obtain political support for desired actions. It is anticipated that the procedure would require the involvement of the state director of vocational education, special needs consultants, the chief planner for the vocational education agency, the sex-equity coordinator, and the person responsible for Civil Rights compliance.	STAFF
The duration of the centralized policy development procedure depends upon the range of special populations considered and the number of policy statements analyzed. Given these considerations, a calendar period of from three to six months would appear to be reasonable.	TIME

No specialized equipment is required. A conference room with standard audiovisual support equipment would facilitate conduct of the committee meeting wherein much of the work would be performed.	EQUIPMENT FACILITIES
Although not absolutely necessary, participation of those external State agencies having an interest in special populations would provide for a broader perspective for the assessment of existing policies and promote a more innovative approach to the formulation of recommended policy options.	PARTICIPANTS
This procedure is generalizable to any specified target populations.	APPLICATIONS
The analysis of existing policies and the formulation of options should expand the understanding of educational professionals as to the complexities inherent in the provision of improved services to special populations. The procedure provides an opportunity for dialogue with external agencies and a chance for mutual exploration and learning as to constraints imposed by the inadequacies of current policies. Active interest in policy development will also serve to increase the visibility of vocational education and to establish its claim as a viable system for the delivery of services to special populations.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

ASSESS EXISTING POLICIES

The first step is to review the adequacy of existing policies to serve as a definite course of action guiding the provision of vocational education to special populations. Assessment of existing policy statements necessitates the location of existing policy statements. The most obvious source for the location of policy statements is a policy manual or other compendium of State board policies. In the absence of such documents, policy statements regarding special populations may have to be ascertained from a search of other sources. These sources might include:

- board publications
- minutes of State board meetings
- long-range plans (including the State Plan for Vocational Education)
- other existing codes of regulations, policies and/or operating procedures published by the State educational agency

Since the board is bound by State school laws, these laws or an interpretation of these laws in the form of regulations by the board has the force of policy.

Once policy statements pertaining to special populations have been located, these statements should be reviewed for the suitability to serve as the basis for planning for special populations. This necessitates that criteria be developed for the assessment of the suitability of policy statements. If the policy is to guide present and future decisions, policy statements must make explicit Board intent with respect to the provision of vocational education to special populations. Clarification of the intent requires that:

1. target populations to be served be designated

2. the range of service alternatives available for target populations be specified
3. the role of vocational education in the provision of these services be clearly identified
4. present organizational and funding constraints be identified

Formulation of policy assessment criteria can be facilitated by an examination of exemplary policy statements. These statements provide a standard against which to assess the adequacy of existing policy statements.

Efforts should be made to involve as wide a constituency as possible in the development of the assessment criteria. One possibility is to include those agencies required by law to be involved in the preparation of the five-year State plans. This group might be augmented by representatives of State agencies with an interest in special populations. A sample of such agencies is presented in Supplement A to this chapter.

The assessment standards, once developed, can be used to assess the adequacy of policy statements. Representatives from State agencies with a vested interest in provision of services to special populations should be identified and requested to serve as policy reviewers. Policy statements and accompanying instructions describing the procedures to be used should be sent to each reviewer. Each policy statement can be rated on each of the criterion standards according to the extent to which the policy statement meets the intent of the criteria. An alternative to rating each policy statement on every policy criterion is simply to indicate which criteria are met by the policy statement. This approach treats each criterion as a standard and rates each policy statement according to whether it has met the standard.

As a result of this step, each policy statement will have been reviewed for adequacy according to a predetermined set of criteria. An analysis of the capability of each policy statement to meet the criteria standards will reveal the inadequacies of existing policy statements.

STEP 2**ESTABLISH SUPPORT FOR POLICY DEVELOPMENT EFFORTS**

Since policy is a formal response to a problem, policy development efforts must coalesce around a problem area. One of the first requirements in the identification of potential problem areas in the provision of vocational education to special populations is the establishment of a problem-generating mechanism. This mechanism can be either a single individual or a group of individuals acting either independently or in an organized capacity. The group of individuals previously involved in assessing existing policy statements would be a logical choice since they have a demonstrated interest in special populations and are knowledgeable of the particular special populations represented.

To facilitate problem identification, a number of special needs populations should be identified. Populations identified should represent those populations which vocational education has a legal mandate to serve; e.g., the handicapped and disadvantaged, as well as those populations which by virtue of unique factors of the State, vocational education has a felt obligation to serve.

Services offered to each of the special populations identified should be analyzed according to a number of general considerations. Among these considerations are:

- the extent to which the assurances made by the State under various pieces of Federal legislation are being met for that special needs group under consideration (Education Amendments of 1976; Education for All Handicapped Children Act; Title VI of Civil Rights Act; Title IV of Education Amendments of 1972, Developmental Disabilities, Title XX of the Social Security Act; Older Americans Act);
- the extent of access to vocational education provided to that particular special needs population;
- the adequacy of the assessment and evaluation procedures used to diagnose their education needs;
- progress in providing the least restrictive learning environment;

- curricular efforts to develop special instructional materials;
- exemplary or innovative program efforts oriented to meeting the needs of special populations;
- outcomes of programmatic efforts to meet the needs of special populations;
- educational and professional development efforts to train professional personnel to serve the needs of special populations; and
- extent of cooperation with other State agencies having a vested interest in the target population.

This analysis should concentrate on the extent to which the intent of the consideration is being met with regard to a specifically identified target population. Particular emphasis should be placed on the identification of problems currently being encountered in meeting the intent of the consideration. This analysis, to be complete, should encompass a wide variety of supportive information. The following listing outlines some possible information sources.

SUPPORTIVE INFORMATION FOR ANALYZING SERVICES
TO SPECIAL POPULATIONS

- Vocational education enrollment data
- Placement data
- State Advisory Council Reports and special studies
- Evaluation reports conducted by the State education agency or other State agencies
- Curriculum development projects undertaken
- Allocations of State and Federal dollars to exemplary and innovative programs directed to special populations of concern
- Demographic data pertaining to special populations
- Special research reports published by agencies and groups, such as:
 - Bureau of Education for the Handicapped
 - Rehabilitation Services Administration
 - Administration on Aging
 - National Council on Aging
 - Council for Exceptional Children
 - National Association for Retarded Citizens
 - National Association for Mental Health
 - National Urban League
 - President's Advisory Commission on the Status of Women

For each problem retained, those key individuals and groups who have a vested interest in the resolution of the problem must be identified. Since problems are target-group specific, the advocacy groups for that target population offer a rich potential for support. A sample listing of these advocacy groups is presented as Supplement B to this chapter.

Identification of key individuals within State agencies will depend in part on the nature of the problem. If, for example, a problem is identified involving coordination or lack of coordination, key individuals may be those agency representatives who can commit their agency to improve levels of coordination. Problems dealing with the development of professional personnel may require the support of teacher educators and administrators who can direct the policies of higher education.

Once these individuals and groups have been identified, an attempt should be made to ascertain the nature of their vested interests in the problem. Determination of vested interests should take into account:

- the clientele served by the key individuals and/or advocacy groups;
- the mission of the agency represented by the key individual;
- the roles of the key individuals in that agency;
- the past history or involvement of that agency with educational matters pertaining to that specific target group; and
- the rewards to accrue from an interest in the particular problem area.

Identification of the interests of the key individuals and support groups and how these interests intersect the problem of concern will facilitate subsequent dialogue. Key individuals and support groups should be contacted, the problem described and an effort made to convince them of the necessity for action. Evidence supporting the existence of the problem should be used to support the contention that lack of adequate policy is inhibiting their capabilities and that it would be in their interest to have the problem alleviated by improving policy. The ultimate purpose of the contact with key individuals and groups is to seek to establish the existence of a problem and to obtain their commitment

to the necessity of dealing with the problem through policy development. This commitment is probably best expressed by their willingness to maintain continuing dialogue.

STEP 3

FORMULATE POLICY ALTERNATIVES

Policy options cannot be developed until those factors constraining the solutions have been identified. The identification of these constraining factors is of critical importance in distinguishing between "blue sky" recommendations that stand little chance of acceptance and recommendations that, although more modest in scope, have a greater chance of being accepted. Possible constraining factors include:

- budgetary limitations;
- an unwillingness to depart substantially from the status quo;
- restraining influence of existing laws, regulations and policies;
- present organizational structures and division of responsibilities;
- saliency of the problem for the present political administration; and
- the personal beliefs, values and idiosyncracies of board members and other key actors whose support is necessary in order to achieve any policy change.

No hard and fast rules exist for determining the nature and extent of constraints of problem solution. Determination of these constraints depends upon a thorough knowledge of those groups and actors whose interests will be served by seeking a solution to the problem, those who will not be supportive of raising the issues implied in the problem, the political strengths of the various groups, and what factors would be acceptable to those whose support is needed.

The identification of constraints will serve to set the bounds of practical reality for viable policy options based upon the understanding of a bounds of acceptability. Policy options should be formulated that are within these bounds. Those individuals involved in the formulation of

the problems for specific target groups should also be involved in the identification of possible policy options that would alleviate the perceived problems. Policy options suggested by these individuals should be reviewed in light of the constraints to determine which options are realistic. Individuals may be independently involved in the creation of policy options or policy options may be created in group sessions. Information on the constraints may be provided to the group prior to the formulation of options, or options may be formulated independently of constraints and subsequently evaluated for their suitability. Exemplary policy statements appearing in the literature may be provided as input into the creative process (see references). The advantage of the latter approach is that more innovative approaches may be formulated in the absence of constraining conditions. The disadvantage is that this approach is less efficient in that some of the options suggested may not be feasible in light of the constraints.

Those options that appear realistic in light of the identified constraints should be further evaluated according to their relative effectiveness and efficiency in resolving the basic problem. Options chosen for evaluation should represent distinct policy choices. One way to accomplish this is to choose options that are the opposites of one another. (Examples might be to fund or not to fund, to increase funding versus decrease funding). These options, by presenting distinct departures from the present structure, make the job of ascertaining the possible consequences of these options somewhat easier.

Since most of these options represent a departure from reality, no ready information will be generally available to indicate the effect of the proposed option. Therefore, it will be necessary, in most instances, to speculate on the consequences of the proposed options. These consequences should be stipulated in as broad a context as possible. Types of consequences include:

- alteration of the nature and extent of quality of services provided;
- effects on costs and allocation of cost between State, Federal and local contributions;
- changes in burden upon existing delivery systems;
- extent of reallocation of benefits across client groups;

- alteration of role of vocational education at State and local levels; and
- possible impact of the proposed change on existing relationships between vocational education and other agencies and organizations.

For each policy option chosen for analysis, the anticipated result should be prepared in the form of a scenario describing in as much detail as possible the anticipated changes resulting from the adoption of the policy options. These scenarios should be organized in a common format to permit ready comparison across various policy options.

STEP 4

RECOMMEND POLICY OPTION

The scenarios for the alternative policy options should be evaluated according to their ability to satisfy constraints identified in Step 3. It is quite likely that no single option will emerge with clear-cut superiority. What is more likely to be the case is that most options will have comparative advantages and disadvantages. The question as to which option to choose must be resolved by selecting that option which strikes the best balance between dealing with the problem at hand and at the same time not exceeding the bounds of political and economic propriety.

A rationale to support the chosen policy option must be developed. This rationale should carefully delineate the benefits to accrue from the adoption of this policy option. In specifying the benefits, particular care should be taken to make it readily apparent how the benefits from the policy option complement the interests of those key individuals and groups whose support is needed to ensure policy adoption. The rationale for support of the recommended policy options should include a brief description of the following elements:

- the basic problem;
- how the proposed policy option will serve to ameliorate the problem conditions;
- the nature and kind of benefits that will accrue to various constituency groups; and
- the costs that will be incurred as a result of adopting the policy option.

Upon selection of a policy option and the development of a corresponding rationale, action should be initiated to convince board members and other key individuals and groups of the wisdom of the policy option. This action may include:

- Formal appearances before the board to explain the rationale of the policy option
- Informal communication with individuals whose support is needed in order to assure adoption of the policy options
- Personal discussions with key individuals and agency representatives
- Appeals to advocacy groups for support of the policy option

The likelihood of the policy option being adopted is largely dependent upon the amount of effort expended to develop support for its adoption. Generally speaking, support is initiated and maintained through the use of a wide variety of tactics. The argument and the media for its presentation should be tailored to specific individuals and key groups. Some individuals and groups may be best approached by a rational argument, well-documented with empirical results. Others may be most responsive to a more rhetorically-attuned argument oriented to their more basic values, attitudes and philosophies. Since no one argument will work for all, acceptance of the recommended option with minimum compromises will require a sustained effort to nurture and maintain the support needed for adoption.

STEP 5

DOCUMENT ADOPTED POLICY

The policies, once adopted, should be documented in a readily accessible form. This requires that policies be codified and presented as a policy manual. To facilitate access, this policy manual should be organized according to topical or functional areas. One suggested approach would be to present all policies pertaining to special populations as a separate chapter.

A useful device for organizing a policy manual is to consider policies as State board regulations. Sets of standards could then be associated with each policy. These standards are the required administrative rules and procedures formulated by the State educational agency to carry

out the intent of the policy. The rules and procedures contained in the standards are enforceable by the State educational agency. Guidelines, on the other hand, are interpreted as suggested procedures that may be used to achieve the intent of the policy as articulated and expanded by the agency standards. In that agency standards may be regarded as operational policies, they may be formulated by the same procedures as have been provided for the formulation of State board policy. Therefore, no additional elaboration will be provided.

FOR ADDITIONAL INFORMATION

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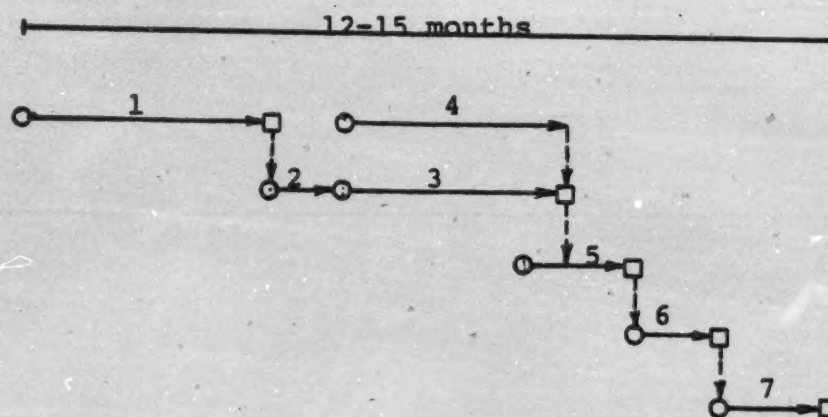
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DECENTRALIZED POLICY FORMULATION

DECENTRALIZED POLICY FORMULATION

LEGEND: ○ START POINT — ACTIVITY —> OUTCOMES □ CONSTRAINT



Steps:

1. Obtain State Board Support
2. Secure Support from Local Educational Agency Personnel
3. Constitute Community Policy Review Groups
4. Provide Technical Assistance
5. Synthesize Group Recommendations
6. Submit to State Board for Approval
7. Document Adopted Policy

OVERVIEW

This procedure presents a participatory approach to policy-making. The role of the State education agency is to serve as the mechanism for recording public sentiment related to issues surrounding the provision of vocational education to special populations and the policy needs inherent in specifications of these issues. The presupposition of this approach is that the local community is in the best position to identify the issues and to provide policy recommendations. Accordingly, the role of the State agency is to establish a mechanism for local participation in policy development and to assist communities in the use of this mechanism to formulate locally derived policy options. These locally derived recommendations are aggregated via regional workshops and ultimately culminate in statewide recommendations for board consideration.

KEY CONSIDERATIONS

The principal factor in determining costs is whether the members of the citizen policy review groups are to be reimbursed for their time and/or travel. If so, per diem and travel estimates must be made and figured in to the cost total as well as participants' fees or honorariums. Cost would also be incurred in the scheduling of regional workshops and of the statewide workshop. Again, the cost would depend in large part upon whether the participants were being paid travel and per diem expenses. Additional expenditures include facility rentals, duplication of supportive technical information and reference materials and other expenses incurred during the provision of technical assistance, such as staff time and travel costs.	COST
Professional staff will be required who can function in a technical advisory role to the local citizen policy review groups. State agency staff functioning in this capacity should be experienced in working with advocacy groups and in assuming a variety of support roles as the need arises to ensure the smooth functioning of these groups.	STAFF
This procedure requires twelve to fifteen months to complete.	TIME

Dissemination of supportive information will require printing and duplication facilities as well as computer capability to prepare informational briefs to support group deliberations.	EQUIPMENT FACILITIES
The procedure permits participation from a wide variety of community agencies and institutions. The extent of inclusiveness is determined by the nomination procedure.	PARTICIPANTS
This procedure can be used to formulate policy for any target population. The extent and range of policy issues and special populations considered by local policy review groups depends on the mandate provided to these groups. This mandate can instruct the groups to concentrate on specific target groups or it can leave the level of specificity to the discretion of local groups.	APPLICATIONS
Perhaps the most significant side effect is the opportunity for the inclusion of local citizens in the policy formulation process. This procedure provides a forum in which to debate the issues and alternatives and a mechanism for synthesization of citizen output into policy recommendations. Through the inclusion of citizens in the process, their understanding of the Federal, State and local responsibilities in dealing with special populations should be improved and their support of vocational education increased.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

OBTAIN STATE BOARD SUPPORT

The first step in this procedure is to obtain board support for seeking local input into policy formulation. The board, in order to give its support to this venture, must be convinced of the necessity for an appraisal of policies guiding the vocational education services to special populations and the political benefits which would be derived from soliciting local input. In obtaining board support, key board members or other individuals influential with the board must be identified and the extent of their sympathy for local involvement in policy determination ascertained. Key individuals might conceivably include the following:

- the State director of vocational education
- the State superintendent and/or commissioner of education
- other top educational administrators (including those in special education)
- State legislators with demonstrated interests in supporting special needs populations
- representatives from other State agencies having mandated responsibility for special populations, such as:
 - Vocational Rehabilitation
 - State Agencies on Aging
 - Mental Retardation
 - Developmental Disabilities
 - State Government Commission on Women

In addition to support from key individuals at the State level, the extent of support at the local level should also be ascertained. This can be achieved by an informal survey of the opinion of selected local education agency personnel and other community leaders.

Once it has been ascertained that there appears to be sufficient support to warrant initiation of this effort, a proposed plan should be prepared and presented to the board for its approval. The proposed plan should present a carefully drawn rationale detailing the need for an assessment of the policies supporting vocational education services to special populations and the benefits that might be expected to accrue from local participation in the assessment and policy formulation process. The rationale should be followed by a description of the methodology required to provide a vehicle for local participation and an estimation of the costs required to secure local involvement. The rationale for involving locals in formulation of policies regarding special interest populations should, to the extent possible, speak to the interest of the key individuals whose support is required to secure board adoption. Draft copies of the plan should be circulated to these individuals and their comments requested. If this is not possible, the gist of the plan should be communicated to these individuals for their comments. To the extent that comments are compatible, they should be considered in developing a revised plan for presentation for board consideration. Since the plan is presented with the prior knowledge and approval of key support groups, chances for board approval are materially increased.

STEP 2

SECURE SUPPORT FROM LOCAL EDUCATIONAL AGENCY PERSONNEL

Once the State board has approved of the principle of community involvement in policy formulation, activities should be undertaken to involve local educational personnel. At the secondary level, letters explaining the project and requesting support should be sent from the superintendent of public instruction to school superintendents. In concert with this effort, the State director of vocational education should contact local vocational education administrators informing them of the project and likewise requesting their support. Communication with Local administrators could be accomplished individually through letters or other means of personal contact or collectively through statewide or regional meetings of Local administrators. A similar

communication effort should be undertaken at the postsecondary level and coordinated with the communication efforts being undertaken at the secondary level.

STEP 3

CONSTITUTE COMMUNITY POLICY REVIEW GROUPS

Local citizen policy review groups should be constituted in sufficient number to represent State, Local and/or county interests in all facets of vocational education for special populations. Each local policy review group should consist of membership representing diverse interests. The following Local agencies and interests should be represented.

SOURCES FOR COMMUNITY POLICY REVIEW GROUP MEMBERS

- Secondary and postsecondary vocational education
- Special education
- Vocational rehabilitation
- Vocational education advisory councils
- Parents and students
- Employer groups
- Organized labor
- Local public service agencies serving special populations (such as social services, welfare agencies, Local rehabilitation offices, public health departments, and Local agencies serving the aging)
- Civic agencies such as local Chambers of Commerce, Jaycees, Lion's clubs
- CETA programs serving special needs populations including Job Corps, Neighborhood Youth Corps, Community-Based Organizations such as the Urban League, Occupational Industrialization Centers and SER
- Community Action Agencies
- Other not-for-profit organizations funded to serve the needs of special target populations
- Public Employment Security agencies as well as specialized agencies serving the needs of distinct target populations

Each area supporting a local policy review group should identify the relevant organizations and agencies to be involved. Each agency so identified should be contacted, the purposes of the policy review group explained and a request made for the nomination of a member to serve on the local citizen policy review group. Requested nominations received from candidate organizations should be reviewed at the local level to reduce duplication and sent to the State agency. The State agency should review the list of recommended nominations provided by the local levels and, depending upon the size of the area represented, select a sufficient number of members to reflect adequately the diversity of constituency groups. Individuals selected to serve on the citizen review groups should be sent a personal letter informing them of their selection and giving them their charge as appointed members of the group. This letter should come from as high a State administrative level as possible, preferably the State superintendent of education or the governor.

Each local policy review group has a three-fold purpose:

- (a) to meet as frequently as necessary to become familiar with all aspects and facets of vocational education as it intersects with the needs of special populations,
- (b) to conduct such meetings and hearings as may be required to gather data and assemble information pertaining to the needs of special populations, and
- (c) to suggest such new policies and/or modifications in existing policies as shall be considered necessary to maintain and further improve the access to and availability of quality vocational education.

These local policy review groups shall avail themselves of all pertinent information concerning vocational education for special populations and particularly that information that pertains to the needs of a local or regional area. Local ordinances, State and Federal laws and the rules and regulations issued by such organizations as the Office of Civil Rights should be made available to these groups for frequent use and/or reference. With sufficient references used to guide and inform their discussions and deliberations, these local policy groups should identify community problems associated with delivery of vocational

education to special populations and the extent that the problems are resolvable by policy enactments. These groups then should prepare suggested policy statements which they believe would improve access and quality of vocational education programs for special populations.

A question of the area represented by these local policy review groups needs to be resolved. Whereas these groups may represent a community, the sheer number of such groups needed to be formed to secure citizen representation may become unwieldy. An alternative is to appoint groups to represent identified service areas. These service areas conceivably could correspond to secondary educational regions, postsecondary community college areas, educational and/or economic planning districts, council or government areas or any other reasonable partitioning of the State into a manageable number of areas. Once the representational areas have been defined, policy review groups should be constituted for each area.

STEP 4

PROVIDE TECHNICAL ASSISTANCE

In order to facilitate the operation of the local policy review groups, technical assistance should be provided by the State agency. Technical assistance is needed in two basic areas:

- (1) in the initial formulation of the groups, and
- (2) in the support of these groups in carrying out their mission.

With regard to formulation of the groups, Local education agencies and/or institutions may be expected to require assistance in the identification of agencies and organizations to be contacted for nominations for potential membership. This assistance might take the form of a listing of special population categories that might be involved and, for each group, an identification of those community agencies and/or organizations that might be expected to best represent the interests of that group. (Supplement B at the end of this chapter provides a sample listing of national organizations serving special populations which are likely to have local offices.) Suggestions as to contact positions within each of the groups would also be helpful. Alternative means of contacting these individuals and the suggested format and content of the initial communication would appear

useful. The following table provides an outline of possible areas of technical assistance State agencies could provide in the formulation, organization and conduct of the local policy review groups.

TECHNICAL ASSISTANCE IN THE FORMULATION AND
SUPPORT OF LOCAL POLICY REVIEW GROUPS

Initial Formulation and Organization of the Groups

- identification of agencies and organizations to be contacted for nominations for membership
- formal statement to the policy review group indicating
 - (1) the overall purpose of the group
 - (2) the extent of the group's responsibilities
 - (3) the nature of the group's output
- suggested plan of organization to include
 - (1) duties and responsibilities of designated group positions
 - (2) minimum number of meetings to be held
 - (3) planned agenda to guide the meetings
 - (4) suggested listing of topics for consideration at the meetings

Conduct of Local Meetings

- provision of pertinent information to the policy review group, such as
 - (1) State laws and administrative regulations pertaining to services to be provided for special populations
 - (2) State board policy on the delivery of vocational education to special populations
 - (3) copies of relevant Federal regulations and guidelines (e.g., the recent Office of Civil Rights regulations)
 - (4) copies of State and local vocational education plans
 - (5) copies of State and area plans required by Federal legislation on other agencies serving special populations (e.g., Area Agencies on Aging, Vocational Rehabilitation)
 - (6) copies of cooperative agreements between State agencies serving special populations

Technical assistance can be provided in a variety of ways. The State vocational education agency could play a passive role providing information only on request. Alternatively, it may actively seek to provide continuing service to these groups. Continuing services may range from the provision of reference materials, available demographic and other information addressing the needs of special populations, and descriptions of current programs being provided by educational agencies to the assignment of staff personnel to provide personal expertise to citizen groups.

STEP 5

SYNTHESIZE GROUP RECOMMENDATIONS

One of the major problems with involvement of a large number of citizen groups is the difficulty associated with summarizing and seeking a consensus across the variety of group inputs. The most participatory means of securing a consensus of group input is through a series of regional conferences ultimately culminating in a single statewide conference. The areas served by the local groups can be aggregated into sub-state regional areas. Each local policy group within the regional sub-state areas can be asked to send one or more members as representatives of that group to a regional workshop.

The purpose of this regional workshop would be to synthesize the policy recommendations of the various groups into a more unified set. The charge to each regional workshop would be similar to that provided the local policy review groups. The product of each of the local policy review groups would be inputted into the regional workshop and through a process of group negotiation would be shaped into a set of issues and recommendations reflecting the consensus of the local group representatives. In this fashion the regional workshops constitute an assembly of local groups with the delegated responsibility of communicating the consensual essence of local recommendations.

By the same procedure, these outputs of the regional workshops could be synthesized at a statewide level through the mechanism of a statewide conference. Representatives from each of the regional conferences could be appointed to represent the regional interest at the statewide conference. The purpose of the statewide conference would be to prepare a report identifying issues in serving special populations and recommending policies addressing these issues. The statewide workshop would be a culmination of the inputs from all of the local policy review groups and would capture the

best intents of bottom-up participation in the policy formulation process.

STEP 6

SUBMIT TO STATE BOARD FOR APPROVAL

The document prepared by the statewide workshop represents the culmination of a process designed to secure wide-ranging citizen inclusion in the policy formulation process. The fact that citizens have been included in the process should ensure support from those agencies and organizations involved in the process. Broad-based citizen support would be a powerful motivating factor in prompting board consideration of the issues and proposed policy recommendations.

STEP 7

DOCUMENT ADOPTED POLICY

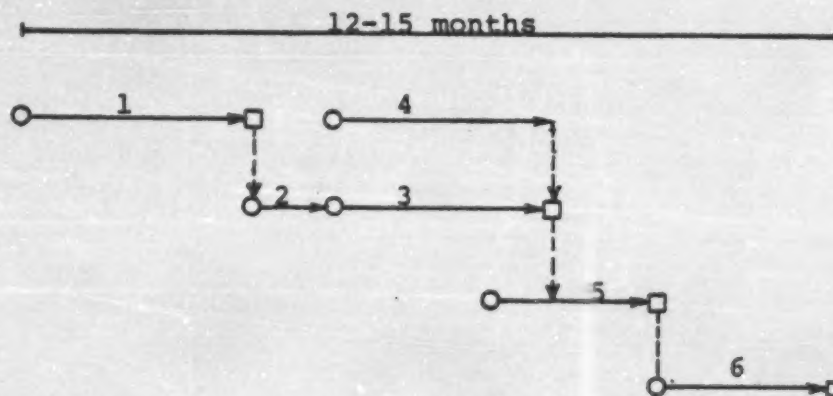
The policies once adopted should be documented in a readily accessible form. This requires that policies be codified and presented as a policy manual. To facilitate access, this policy manual should be organized according to topical or functional areas. One suggested approach would be to present all policies pertaining to special populations as a separate chapter.

A useful device for organizing a policy manual is to consider policies as State board regulations. Sets of standards could then be associated with each policy. These standards are the required administrative rules and procedures formulated by the State educational agency to carry out the intent of the policy. The rules and procedures contained in the standards are enforceable by the State educational agency. Guidelines, on the other hand, are interpreted as suggested procedures that may be used to achieve the intent of the policy as articulated and expanded by the agency standards. In that agency standards may be regarded as operational policies, they may be formulation of State board policy. Therefore, no additional elaboration will be provided.

**MIXED CENTRAL-DECENTRALIZATION POLICY
FORMULATION**

CENTRALIZED-DECENTRALIZED POLICY FORMULATION

LEGEND: ○ START POINT → ACTIVITY □ OUTCOME - - - - - CONSTRAINT



Steps:

1. Obtain State Board Support
2. Secure Support from Local Educational Agency Personnel
3. Constitute Community Policy Review Groups
4. Provide Technical Assistance
5. Synthesize Group Recommendations
6. Submit Report to State Board

OVERVIEW

The mixed approach involves elements of both the centralized and decentralized approach to policy formulation. The procedure is a decentralized approach to policy formulation in that it involves input from local community groups as to issues involving provision of vocational education services to special populations and recommended policies to deal with these issues. It also involves elements of the centralized approach to policy formulation in that the issues and recommendations of local groups are analyzed at the State level, issues determined and policy recommendations made for State board consideration.

KEY CONSIDERATIONS

The principal factor in determining costs is whether the members of the citizen policy review groups are to be reimbursed for their time and/or travel. If so, per diem and travel estimates must be estimated and included in the cost total as well as participants' fees or honorariums. Additional expenditures include duplication of supportive technical information and reference materials, other expenses incurred during the provision of technical assistance, such as staff time and travel costs, and State agency staff time involved in synthesizing results.	COST
Professional staff will be required who can function in a technical advisory role to the local citizen policy review groups. State agency staff functioning in this capacity should be experienced in working with advocacy groups and in assuming a variety of support roles as the need arises to ensure the smooth functioning of these groups. An educational professional with a thorough understanding of vocational education and the needs of special populations will be required to summarize and synthesize the recommendations of the local policy review groups. A half-time clerk may also be required for a period of two to three months.	STAFF
Twelve to fifteen months is required to complete this procedure.	TIME

Dissemination of supportive information will require printing and duplication facilities as well as computer capability to prepare informational briefs to support group deliberations.	EQUIPMENT FACILITIES
The procedure permits participation from a wide variety of community agencies and institutions. The extent of inclusiveness is determined by the nomination procedure. In addition to local participants, the process calls for input from State agencies having an overlapping interest in the provision of services to special populations. The number and composition of external agency representatives depends on the specific special populations targeted by the policy development.	PARTICIPANTS
This procedure can be used to formulate policy for any target population. The extent and range of policy issues and special populations considered by local policy review groups depends on the mandate provided to these groups. This mandate can instruct the groups to concentrate on specific target groups or it can leave the level of specificity to the discretion of local groups.	APPLICATIONS
Perhaps the most significant side effect is the opportunity for the inclusion of local citizens in the policy formulation process. This procedure provides a forum in which to debate the issues and alternatives and a mechanism for synthesization of citizen output into policy recommendations for board consideration. Through the inclusion of citizens in the process, their understanding of the Federal, State and local responsibilities in dealing with special populations should be improved. Dialogue with external agencies having an interest in special populations will promote and enhance communication and coordination with these agencies. Improved coordination with these agencies is a positive step toward achievement of a comprehensive interagency approach to the provision of services to special populations.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

OBTAIN STATE BOARD SUPPORT

The first step in this procedure is to obtain board support for seeking local input into policy formulation. The board, in order to give its support to this venture, must be convinced of the necessity for an appraisal of policies guiding the vocational education services to special populations and the political benefits which would be derived from soliciting local input. In obtaining board support, key board members or other individuals influential with the board must be identified and the extent of their sympathy for local involvement in policy determination ascertained. Key individuals might conceivably include the following:

- the State director of vocational education
- the State superintendent and/or commissioner of education
- other top educational administrators (including those in special education)
- State legislators with demonstrated interests in supporting special needs populations
- representatives from other State agencies having mandated responsibility for special populations, such as:
 - Vocational Rehabilitation
 - State Agencies on Aging
 - Mental Retardation
 - Developmental Disabilities
 - State Government Commission on Women

In addition to support from key individuals at the State level, the extent of support at the local level should also be ascertained. This can be achieved by an informal survey of the opinion of selected local education agency personnel and other community leaders.

Once it has been ascertained that there appears to be sufficient support to warrant initiation of this effort, a proposed plan should be prepared and presented to the board for its approval. The proposed plan should present a carefully drawn rationale detailing the need for an assessment of the policies supporting vocational education services to special populations and the benefits that might be expected to accrue from local participation in the assessment and policy formulation process. The rationale should be followed by a description of the methodology required to provide a vehicle for local participation and an estimation of the costs required to secure local involvement. The rationale for involving locals in formulation of policies regarding special interest populations should, to the extent possible, speak to the interest of the key individuals whose support is required to secure board adoption. Draft copies of the plan should be circulated to these individuals and their comments requested. If this is not possible, the gist of the plan should be communicated to these individuals for their comments. To the extent that comments are compatible, they should be considered in developing a revised plan for presentation for board consideration. Since the plan is presented with the prior knowledge and approval of key support groups, chances for board approval are materially increased.

STEP 2

SECURE SUPPORT FROM LOCAL EDUCATIONAL AGENCY PERSONNEL

Once the State board has approved of the principle of community involvement in policy formulation, activities should be undertaken to involve local educational personnel. At the secondary level, letters explaining the project and requesting support should be sent from the superintendent of public instruction to school superintendents. In concert with this effort, the State director of vocational education should contact local vocational education administrators informing them of the project and likewise requesting their support. Communication with Local administrators could be accomplished individually through letters or other means of personal contact or collectively through statewide or regional meetings of Local administrators. A similar

communication effort should be undertaken at the postsecondary level and coordinated with the communication efforts being undertaken at the secondary level.

STEP 3

CONSTITUTE COMMUNITY POLICY REVIEW GROUPS

Local citizen policy review groups should be constituted in sufficient number to represent State, Local and/or county interests in all facets of vocational education for special populations. Each local policy review group should consist of membership representing diverse interests. The following Local agencies and interests should be represented.

SOURCES FOR COMMUNITY POLICY REVIEW GROUP MEMBERS

- Secondary and postsecondary vocational education
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- Parents and students
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- Organized labor
- Local public service agencies serving special populations (such as social services, welfare agencies, Local rehabilitation offices, public health departments, and Local agencies serving the aging)
- Civic agencies such as local Chambers of Commerce, Jaycees, Lion's clubs
- CETA programs serving special needs populations including Job Corps, Neighborhood Youth Corps, Community-Based Organizations such as the Urban League, Occupational Industrialization Centers, and SER
- Community Action Agencies
- Other not-for-profit organizations funded to serve the needs of special target populations
- Public Employment Security agencies as well as specialized agencies serving the needs of distinct target populations.

Each area supporting a local policy review group should identify the relevant organizations and agencies to be involved. Each agency so identified should be contacted, the purposes of the policy review group explained and a request made for the nomination of a member to serve on the local citizen policy review group. Requested nominations received from candidate organizations should be reviewed at the local level to reduce duplication and sent to the State agency. The State agency should review the list of recommended nominations provided by the local levels and, depending upon the size of the area represented, select a sufficient number of members to reflect adequately the diversity of constituency groups. Individuals selected to serve on the citizen review groups should be sent a personal letter informing them of their selection and giving them their charge as appointed members of the group. This letter should come from as high a State administrative level as possible, preferably the State superintendent of education or the governor.

Each local policy review group has a three-fold purpose:

- (a) to meet as frequently as necessary to become familiar with all aspects and facets of vocational education as it intersects with the needs of special populations,
- (b) to conduct such meetings and hearings as may be required to gather data and assemble information pertaining to the needs of special populations, and
- (c) to suggest such new policies and/or modifications in existing policies as shall be considered necessary to maintain and further improve the access to and availability of quality vocational education.

These local policy review groups shall avail themselves of all pertinent information concerning vocational education for special populations and particularly that information that pertains to the needs of a local or regional area. Local ordinances, State and Federal laws and the rules and regulations issued by such organizations as the Office of Civil Rights should be made available to these groups for frequent use and/or reference. With sufficient references used to guide and inform their discussions and deliberations, these local policy groups should identify community problems associated with delivery of vocational

education to special populations and the extent that the problems are resolvable by policy enactments. These groups then should prepare suggested policy statements which they believe would improve access and quality of vocational education programs for special populations.

A question of the area represented by these local policy review groups needs to be resolved. Whereas these groups may represent a community, the sheer number of such groups needed to be formed to secure citizen representation may become unwieldy. An alternative is to appoint groups to represent identified service areas. These service areas conceivably could correspond to secondary educational regions, postsecondary community college areas, educational and/or economic planning districts, council or government areas or any other reasonable partitioning of the State into a manageable number of areas. Once the representational areas have been defined, policy review groups should be constituted for each area.

STEP 4

PROVIDE TECHNICAL ASSISTANCE

In order to facilitate the operation of the local policy review groups, technical assistance should be provided by the State agency. Technical assistance is needed in two basic areas:

- (1) in the initial formulation of the groups, and
- (2) in the support of these groups in carrying out their mission.

With regard to formulation of the groups, Local education agencies and/or institutions may be expected to require assistance in the identification of agencies and organizations to be contacted for nominations for potential membership. This assistance might take the form of a listing of special population categories that might be involved and, for each group, an identification of those community agencies and/or organizations that might be expected to best represent the interests of that group. (Supplement B at the end of this chapter provides a sample listing of national organizations serving special populations which are likely to have local offices.) Suggestions as to contact positions within each of the groups would also be helpful. Alternative means of contacting these individuals and the suggested format and content of the initial communication would appear

useful. The following table provides an outline of possible areas of technical assistance State agencies could provide in the formulation, organization and conduct of the local policy review groups.

TECHNICAL ASSISTANCE IN THE FORMULATION AND
SUPPORT OF LOCAL POLICY REVIEW GROUPS

Initial Formulation and Organization of the Groups

- identification of agencies and organizations to be contacted for nominations for membership
- formal statement to the policy review group indicating
 - (1) the overall purpose of the group
 - (2) the extent of the group's responsibilities
 - (3) the nature of the group's output
- suggested plan of organization to include
 - (1) duties and responsibilities of designated group positions
 - (2) minimum number of meetings to be held
 - (3) planned agenda to guide the meetings
 - (4) suggested listing of topics for consideration at the meetings

Conduct of Local Meetings

- provision of pertinent information to the policy review group, such as
 - (1) State laws and administrative regulations pertaining to services to be provided for special populations
 - (2) State board policy on the delivery of vocational education to special populations
 - (3) copies of relevant Federal regulations and guidelines (e.g., the recent Office of Civil Rights regulations)
 - (4) copies of State and local vocational education plans
 - (5) copies of State and area plans required by Federal legislation on other agencies serving special populations (e.g., Area Agencies on Aging, Vocational Rehabilitation)
 - (6) copies of cooperative agreements between State agencies serving special populations

Technical assistance can be provided in a variety of ways. The State vocational education agency could play a passive role providing information only on request. Alternatively, it may actively seek to provide continuing service to these groups. Continuing services may range from the provision of reference materials, available demographic and other information addressing the needs of special populations, and descriptions of current programs being provided by educational agencies to the assignment of staff personnel to provide personal expertise to citizen groups.

STEP 5

SYNTHESIZE GROUP RECOMMENDATIONS

A committee of State agency personnel should be constituted to review the output from the local policy review groups. This committee ideally should contain representatives from secondary and postsecondary vocational education, special education, vocational rehabilitation, State agencies on the aging, and other State agencies with a vested interest in service to special populations. Since vocational education plays a central role in this process, it would seem reasonable to have the chairperson of this committee represent vocational education interests. This committee, once constituted, will have as its primary charge the review of the issues and policy recommendations developed as the culminating documents of each of the local policy review groups. Policy issues and recommendations should be content analyzed to determine the variety and extent of basic issues and policy recommendations made. The committee's function will be to clarify and synthesize the range of issues and policy options provided and to distill these into a manageable number for further consideration.

Each major issue, once identified, should be reviewed for its saliency to the provision of improved accessibility of vocational education programs and services for special needs populations. Policy options recommended should be evaluated for their desirability and feasibility of implementation. One way to do this is for group members to rate the recommended policy options as to the likelihood that the recommended policy option would be a feasible and viable approach to the policy issues.

Those issues that were deemed to be salient and those policy responses that were deemed to be both feasible and likely to produce the intended results would constitute the core of recommendations to be made to the State board for policy formulation. Those issues that were considered

to be salient but for which the policy options were considered either not feasible or not likely to provide the intended result would identify a set of issues in need of a resolution strategy. In addressing these issues, the committee should:

- (1) consider what possible policy recommendations might be made to address these issues,
- (2) identify alternative recommendations, and
- (3) select those recommendations that, in their collective belief, would be most likely to achieve the intended result.

Recommended policy options for issues judged to be not salient should be reviewed to determine if any of those options had merit in terms of issues other than those identified. If so, these issues should be identified and the policy options reviewed to determine whether they would represent viable approaches to those issues. If so, these issues and policy options should also be included in the committee's report to the board.

STEP 6

SUBMIT A REPORT TO THE STATE BOARD

The committee organized in Step Five should submit its recommendations for policy formulation to the State board. These recommendations should be based on a thorough analysis and review of the output documents provided by the local policy review groups. In those instances where recommendations by local groups were not approved or were significantly modified, a rationale for this action should be provided. The committee, in formulating its recommended policy options should, in all instances, attempt to make recommendations that integrate and consolidate the services provided by the various agencies so as to achieve improved efficiency in the utilization of resources for the provision of vocational education to special populations. A strong rationalization and a cooperative approach to the issues identified by the local policy review groups should provide the board with an integrated statement of local need and a coordinated assessment of the recommended policies required to deal with these needs. In this manner, this approach presents a synthesis of local participation in the identification of community needs while maintaining a State-oriented perspective on the policies required to best serve these needs.

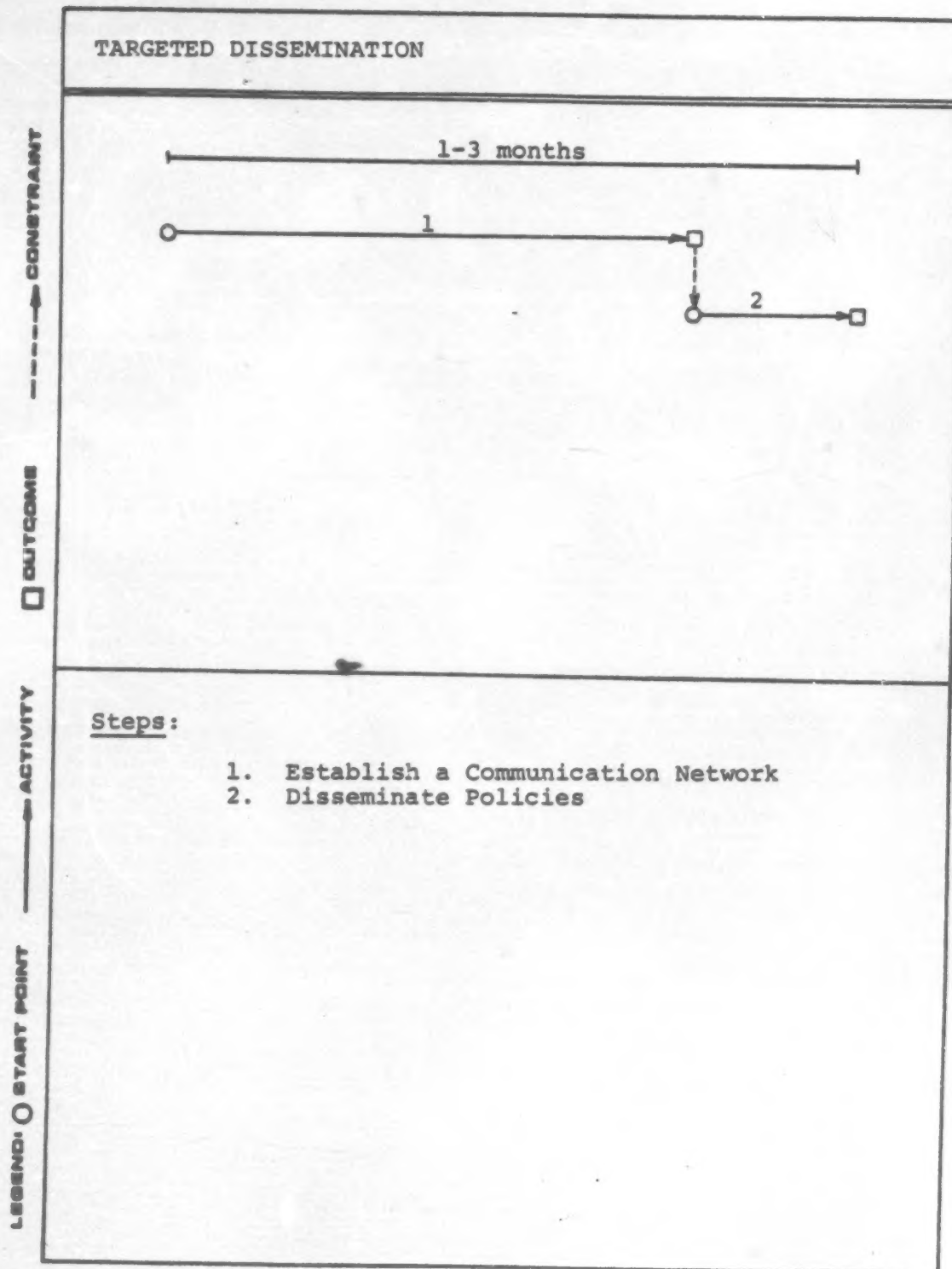
DISSEMINATION OF POLICIES

The second phase of policy development is the dissemination of formulated policies. Dissemination is a necessary step in order that programmatic activities for special populations are consistent with the intents of statewide policies. Furthermore, only through dissemination can policies fulfill their roles in guiding the course of vocational education for special populations. Finally, through dissemination, policies of the State board can be made reasonably available to the public, as is stipulated in the Education Amendments of 1976.

Presented in this section are two procedures by which policies can be disseminated throughout the State. The first procedure is a targeted dissemination which directs policies to those individuals or groups that are particularly interested in or affected by statewide policies relating to vocational education for special populations. Presented second is a process for a general dissemination. In this procedure guidelines are provided for distributing policies to the general public.

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TARGETED DISSEMINATION



OVERVIEW

A targeted dissemination is useful to convey to vocational educators and other service providers the intents of the State board with regard to special populations. The procedures used to reach individuals and groups interested in and/or affected by vocational education special needs policies involve first establishing a communication network. This network serves as an audience for targeting the dissemination and also as a source of input in a decentralized policy formulation approach. Once the network is established, an appropriate vehicle for distribution is selected and policies are disseminated.

KEY CONSIDERATIONS

The cost of a targeted dissemination will vary based upon the extent of the dissemination and the vehicle by which the policies are disseminated. Expenses include staff time involved in establishing a communication network and distributing materials, mailing costs, publication expenses, and possibly graphic design or audiovisual production costs.	COST
The targeted dissemination requires some input from agency staff who are knowledgeable of groups or individuals who would be affected by the policies to be disseminated. Also necessary are staff to design and produce the vehicles (e.g., policy manual, brochure) by which the policies are disseminated and to handle the actual dissemination.	STAFF
Developmental time will vary dependent upon the format in which the policies are disseminated. Development of a film or State plan will take substantial time, whereas the writing of a letter or developing a presentation for a meeting will require much less time. Additional time will be required for printing or duplication and actual dissemination of the policies.	TIME

Specialized equipment or facilities that may be required for a targeted dissemination are graphics materials, printing and duplicating facilities, or projectors for viewing a film.	EQUIPMENT FACILITIES
Not applicable to this procedure.	PARTICIPANTS
The targeted dissemination is intended primarily as a means for informing Local education agencies and other groups about policies regarding vocational education for special populations and the procedural implications of such policies.	APPLICATIONS
In addition to informing groups of statewide policy changes, the targeted dissemination may serve to create an awareness of and interest in the intents of the State agency with regard to special populations.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

ESTABLISH A COMMUNICATION NETWORK

The first step in a targeted policy dissemination is to establish a communication network of interested groups and individuals. Establishing a communication network involves first identifying those parties who would be affected by or interested in statewide policies relating to vocational education for special populations. These groups or individuals could include:

POTENTIAL MEMBERS OF A COMMUNICATION NETWORK

- Local education agencies
- Related local service agencies (e.g., vocational rehabilitation)
- State and Local advisory councils
- Other State agencies involved in serving special populations
- Special population advocacy groups
- Associations representing business and industry
- Labor unions
- Work education councils
- Career education advisory councils
- Prime Sponsors planning councils
- Community-based organizations
- Other social and community groups

Sex equity coordinators, handicapped and disadvantaged consultants and other State staff representing the educational needs of special populations should be able to provide input to this step based on contacts they have established throughout the State.

Identified agencies, groups and individuals should be retained on a dissemination list, which can be supplemented with names of individuals making inquiries to the State agency or parties identified at a later date. The dissemination list will represent a plan for establishing a communication network, a guide for the distribution of policy. As the dissemination takes place, the network will undoubtedly grow and evolve into a two-way communication organ. At this point, the communication network will become a useful component of policy formulation as well. If dissemination occurs during the policy development process (as opposed to after), input should be encouraged and used in policy formulation as described in the previous chapter of this volume.

STEP 2

DISSEMINATE POLICIES

The technique(s) chosen to disseminate policy will depend on the audience to which the policies are distributed. Likewise, the audience may be dependent on the form of dissemination selected or the nature of the policies. For example, the State agency may wish to disseminate a policy manual only to those subject to procedural changes affected by the policies. A letter or brochure could be sent to peripheral groups announcing the availability of the manual. This dissemination approach would avoid excessive mailing of a relatively expensive document. However, by also utilizing the brochure, there is a greater assurance that the policy manual will reach relevant groups and individuals. The following table summarizes some techniques and their uses in disseminating policies.

VEHICLES FOR A TARGETED DISSEMINATION

1. To announce policy and resultant procedural revisions.

Routinely disseminated to service providers and to others on request.

- Policy manuals
- State agency newsletters
- Mini-plans or State plans

2. To announce the availability of policy manuals, plans, etc.

Routinely distributed to interested agencies and groups.

- Letters
- Brochures/fliers

3. To communicate to specific groups intent and/or impact of vocational education policies regarding special populations.

- Films
- Presentations at meetings
- Articles in specialized magazines or newsletters

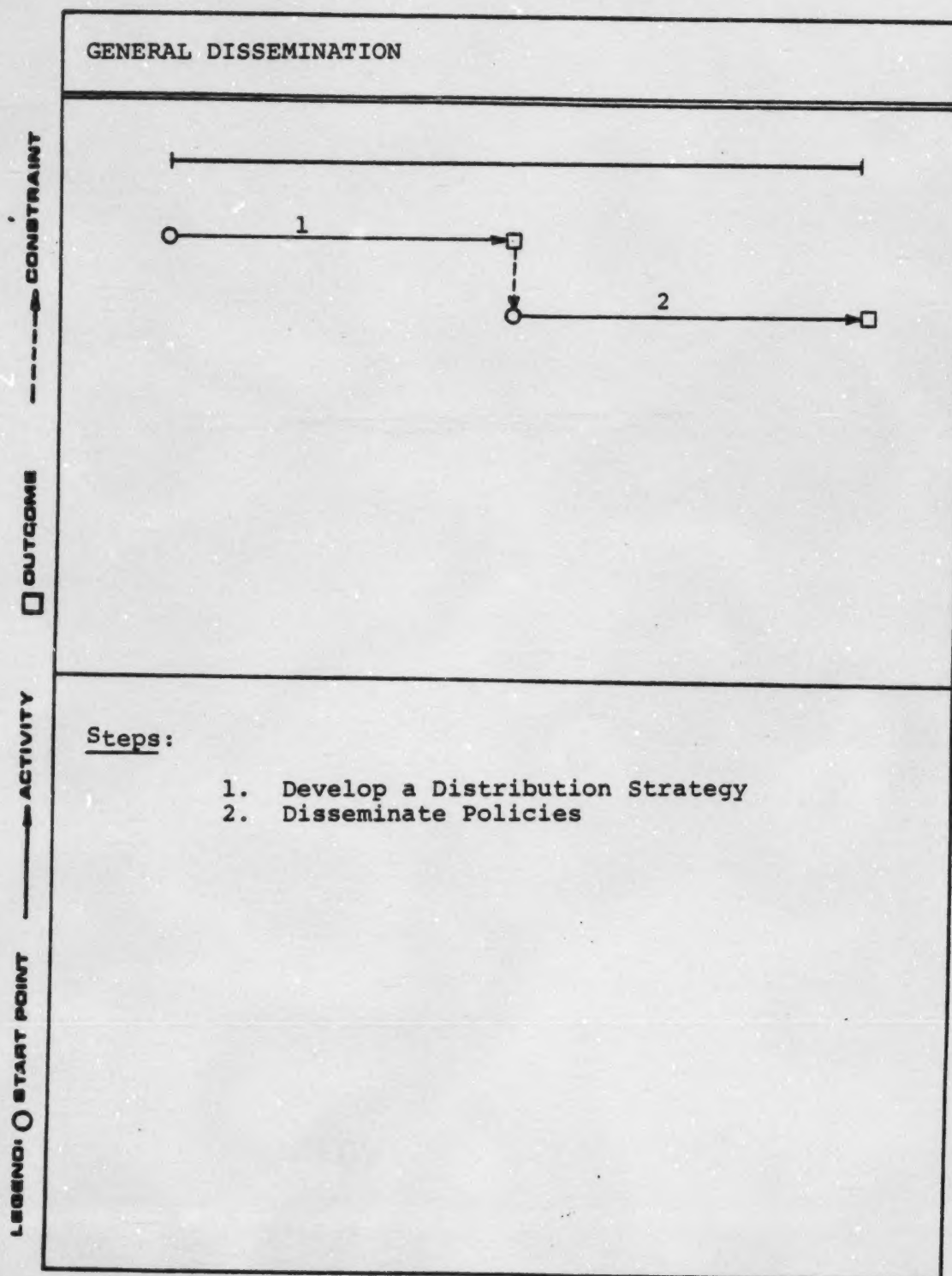
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GENERAL DISSEMINATION



OVERVIEW

A general dissemination consists of a wide circulation of the intents expressed in State vocational education policies for special populations. It is a means of making known to the public the policies of the State and can thus serve to create an awareness of the types of services which vocational educators are able to provide. By reaching individuals with common or unique education needs, the dissemination can stimulate people's interests in vocational education programs and the opportunities available to them. There are numerous techniques for reaching the public and announcing policies regarding special populations. Presented in this section are guidelines for developing a distribution strategy and a number of techniques which can serve as vehicles for a general policy dissemination.

KEY CONSIDERATIONS

The cost of the dissemination will depend upon the vehicle used to disseminate policy as well as the extent of the distribution. Potential expenses include staff time required to develop and disseminate materials, mailing costs, publication expenses, graphic design or audiovisual production costs.	COST
Staff are required to design and produce the vehicles by which the policies are disseminated and to handle the actual dissemination. Desirable skills include writing, public relations and artistic abilities.	STAFF
Developmental time will vary dependent upon the format in which the policies are disseminated. However, most of the techniques can be implemented in a relatively short time. Printing or duplication and actual dissemination of the policies will require additional time.	TIME

Specialized equipment or facilities that may be required for a general dissemination are graphics materials and printing and duplicating facilities.	EQUIPMENT FACILITIES
Not applicable to this procedure.	PARTICIPANTS
The general dissemination is a means of making known to the public the policies of the State.	APPLICATIONS
In addition to informing the citizenry of statewide policy changes, the general dissemination may serve to create an awareness of and interest in the intents of the State agency with regard to special populations.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

DEVELOP A DISTRIBUTION STRATEGY

Developing a strategy for reaching various types of people is the first step in this process. There are numerous strategies which can be effective in conveying policies to the general population. For example, the mass media can be used to publicize State intent. Less formal means such as information handouts placed in libraries and other public places may also be effective. Public appearances at PTA meetings or meetings of other community organizations are another approach to reaching the general public.

In selecting or designing a strategy, a number of factors should be taken into account. First, the nature of the policies will influence the selection of a distribution strategy. If the policies address a variety of special populations, it will be desirable to reach a large and varied audience in the dissemination. Multiple methods may be selected in this instance. For example, many economically disadvantaged persons may not own television sets. An announcement on public television would thus reach a limited number of this special group. This approach could be supplemented with other techniques, such as suitably placed posters or information handouts.

Characteristics of the population are important to consider when developing a dissemination strategy. Considerations which should be taken into account are:

- What types of publications do members of this group read?
- Where does this group go?
- What media type would be most likely to reach members of this group?
- What are the common interests and needs of this group?

For example, if limited English-speaking individuals or groups are subjects of policies, a publication in English would not be an appropriate dissemination vehicle. Foreign language publications or radio announcements may be determined suitable in such instances. By determining the relationship between members of the special group and various dissemination techniques, an appropriate strategy can be developed.

Finally, the resources of the State agency will need to be taken into account in developing a strategy. If funds are limited, paid advertisements may not be feasible. Likewise, a mass mailing may be unaffordable. However, such techniques as handouts placed in appropriate locations or news releases may prove cost-effective. Alternatively, the State agency may be able to arrange for free public service announcements on local radio or TV stations.

STEP 2

DISSEMINATE POLICIES

Once the "how" and "to whom" have been established in Step One, policies and any appropriate supportive information can be disseminated as outlined in the distribution strategy. Specific vehicles which can be useful in disseminating policies to the general public are listed in the following table.

VEHICLES FOR A GENERAL POLICY DISSEMINATION

To announce or advertise to the general public the policies of the State board with regard to special populations.

- Random or specialized mailouts
- Press releases
- Radio/TV messages
- Posters
- Bumper stickers
- Information handouts
- Newsletters
- Magazines
- PTA programs
- Appearances at community organizations
- Billboards

FOR ADDITIONAL INFORMATION

Central Midwestern Regional Lab & Research for Better Schools, Inc. An Overview of State Dissemination Activities. Washington, D.C.: National Institute of Education (DHEW), 1978.

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SUPPLEMENT A

State Agencies Serving Special Populations

HANDICAPPED

Vocational Rehabilitation
Mental Health and Mental Retardation
Exceptional Children
Developmental Disabilities
Social Services
Employment of the Handicapped
Public Health
Public Welfare
Blind Service

DISADVANTAGED

Youth Services
Public Welfare
Juvenile Services
Compensatory Education
Social Services
Children and Family Services
Office of Affirmative Action
Women and Minors Employment
Youth Commission
Employment and Training Council
CETA Balance of State

CORRECTIONAL INMATES

Parole Commission
Department of Correction
Adult Probation and Parole
Social Services
Office of Paroles
Office of Probation
Public Welfare

WOMEN

Commission (Council) on Status of Women
Office of Affirmative Action
Women and Minors Employment
Homemakers Services

LIMITED ENGLISH-SPEAKING

Migrant Education
Spanish Community Relations
Spanish-Speaking Peoples Commission

SUPPLEMENT B

National Professional and Voluntary Organizations

Serving Special Populations

HANDICAPPED

United Cerebral Palsy Association
National Association of the Deaf
National Federation for the Blind
American Council of the Blind
National Association for Retarded Citizens
Muscular Dystrophy Association
National Multiple Sclerosis Society
National Easter Seal Society for Crippled
Children and Adults
National Foundation - March of Dimes
Council for Exceptional Children
National Rehabilitation Association
American Speech and Hearing Association
President's Committee on Mental Retardation
American Federal of the Physically Handicapped
National Association for Mental Health
Alexander Graham Bell Association for the Deaf
National Foundation for the Handicapped and
Disabled
American Coalition of Citizens with Disabilities
Mainstream, Inc.
National Paraplegia Foundation

DISADVANTAGED

National Urban League

N.A.A.C.P.

Legal Defense Fund

National Institute for Advanced Study in
Teaching Disadvantaged Youth

American Civil Liberties Union

Equal Opportunity Programs, Incorporated

National Center for Urban Ethnic Affairs

National Youth Work Alliance

National League of Cities

National Urban Indian Council

Minority Legal Rights Foundation

WOMEN

National Organization of Women

Women's Equity Action League

President's Advisory Commission on the
Status of Women

National Council of Negro Women

Women's Action Alliance

National Council of Career Women

Women's Legal Defense Fund

National Association of Black Women

National Women's Center Training Project

Alliance for Displaced Homemakers

Equal Rights for Women in Education -
Education Commission of the States

American Business Women's Association

LIMITED ENGLISH-SPEAKING

Mexican-American Council on Education

National Association for Puerto Rican
Civil Rights

Foundation for Mexican-American Studies

Chinese for Affirmative Action

Japanese-American Society

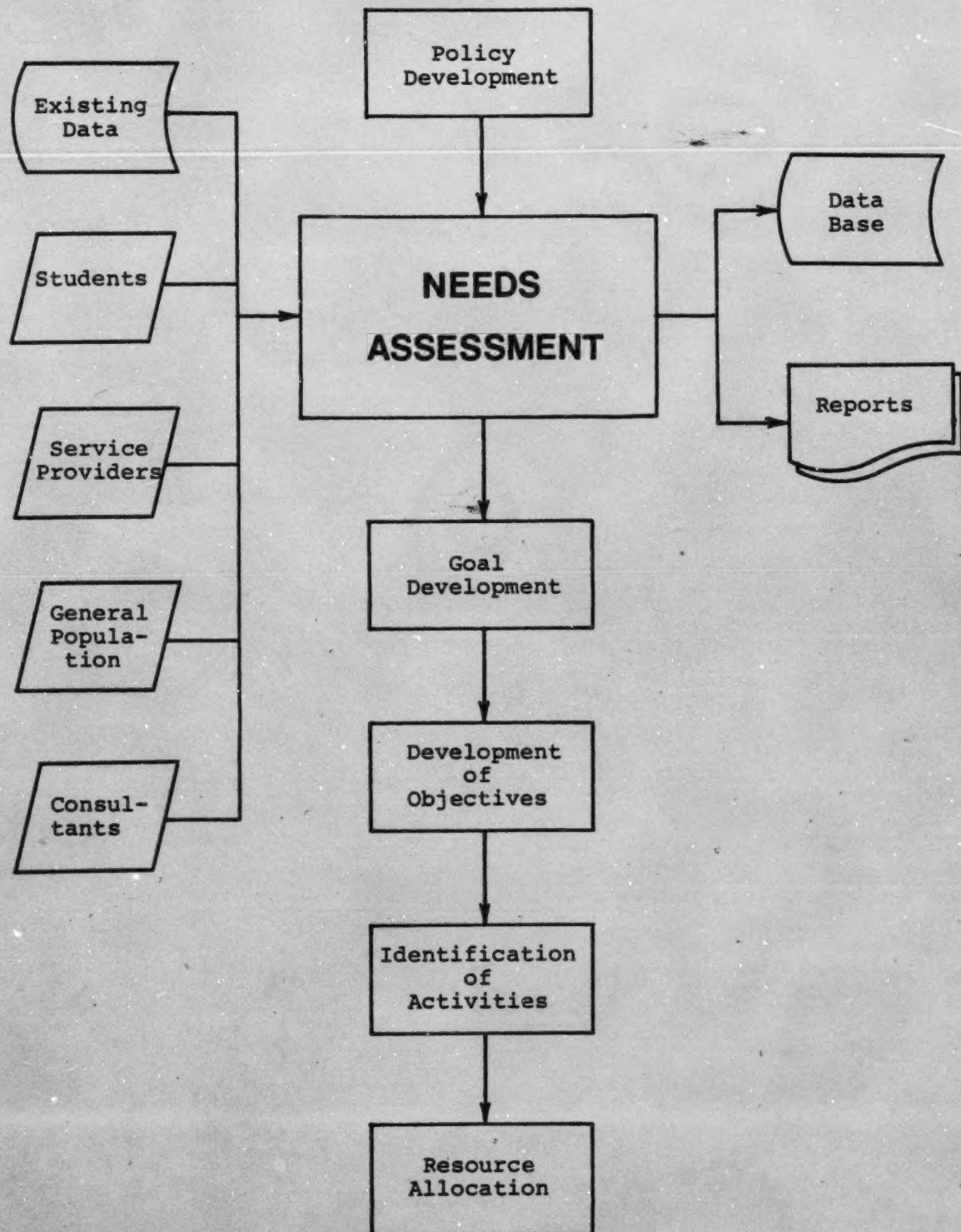
Association for the Advancement of Mexican
Americans

CORRECTIONAL INSTITUTION INMATES

American Correctional Association

American Civil Liberties Union

CHAPTER FOUR



NEEDS ASSESSMENT

Presented in Chapter Four of the E.S.P. System are alternative procedures for assessing the needs of various special populations. Used in this context, needs assessment differs somewhat from its traditional function as a means for identifying student demand for occupational program areas and associated employment opportunities. Assessing the needs of special populations involves identifying those needs which require supportive services to overcome barriers to the success of these special groups in vocational education programs. The results of the needs assessments thus guide subsequent components of the planning process; i.e., development of goals and objectives and identification of programs, services and activities to satisfy the objectives.

There are three key activities which constitute the needs assessment component of the E.S.P. System:

<u>Key Activity</u>	<u>Page</u>
1. Surveys of Out-of-School Populations' Needs	5
2. Surveys of Current Students' Needs	39
3. Assessing Needs through Analysis of Existing data	63

When assessing the needs of special populations, the following characteristics should be taken into account. This will enhance the implementation of any of the procedures presented in this chapter.

Characteristics of the Process

1. Educational and occupational needs and desires are identified for a variety of special populations such as:
 - A. Handicapped persons
 - B. Disadvantaged persons
 - C. Limited English-speaking persons
 - D. Displaced homemakers
 - E. Single heads of households who lack adequate job skills
 - F. Homemakers who work part-time but seek full-time employment
 - G. Those who seek employment in jobs not traditionally held by members of their sex
 - H. Inmates in correctional institutions

Characteristics of the Products

1. The results of the needs assessment are presented in a format which facilitates goal development and future decision-making.

SECTION 1

**SURVEYS OF OUT-OF-SCHOOL
POPULATIONS' NEEDS**

SURVEYS OF OUT-OF-SCHOOL POPULATIONS' NEEDS

Presented within this section are two alternative approaches which States can use to assess the needs of special populations not currently enrolled in school. The first alternative is to include a special population needs assessment as a part of a more comprehensive survey of the general population. Such a survey could focus entirely on vocational education, or could be a component of an inter-agency effort to survey the State's population in order to be more responsive to citizen needs and concerns. The second alternative is to conduct a targeted survey which focuses exclusively upon special populations not currently enrolled in school. Because of their restricted focus, targeted surveys are likely to provide more detailed information on the special population's needs; however their restricted focus also is likely to make them less attractive for the inter-agency sponsorship.

<u>Procedure</u>	<u>Page</u>
General Population Survey	
overview	7
key considerations	8
implementation steps	10
for additional information	17
Targeted Survey of Special Populations	
overview	19
key considerations	20
implementation steps	22
for additional information	37

GENERAL POPULATION SURVEY

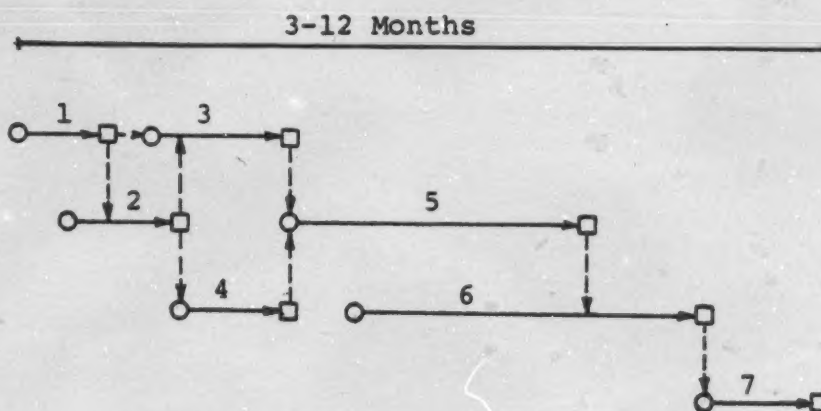
LEGEND: ○ START POINT

□ OUTCOME

— ACTIVITY

--- CONSTRAINT

GENERAL POPULATION SURVEY



Steps:

1. Identify Special Populations of Concern to the State Agency
2. Define State Agency Information Needs
3. Develop Sampling Plan
4. Develop Survey Questionnaire
5. Conduct the Survey
6. Process and Analyze the Survey Data
7. Report the Results

OVERVIEW

Assessments of the needs of special populations can be conducted as part of a more comprehensive survey of the general population; however, to do so requires a relatively large sample of the general population in order to ensure adequate representation of the special population(s) of concern to the State agency. Because the results of a general population survey can be of interest to a number of State agencies, it is possible for such a survey to be conducted as a joint effort. Alternatively, the vocational education agency might be able to piggy-back questionnaire items pertaining to special populations onto a general population survey being conducted by another agency.

Planning for the implementation of a general population survey with a special populations needs assessment component will entail the identification of the special populations of concern to the State agency, determination of agency information needs pertaining to those special populations, development of a sampling plan, and development of the survey items or questionnaire. Pre-tested survey instruments are then either mailed to respondents, or telephone or personal interviews are conducted to collect the survey data. Completed questionnaires will need to be screened or checked for completeness and then analyzed. The results of the analysis are then documented in a written report.

KEY CONSIDERATIONS

General population surveys represent the most costly alternative for assessing the needs of special populations, since much of the information which will be collected will not pertain to special populations. However, the scope of information which can be obtained through a general population survey can be of interest to a variety of State agencies, thus creating an opportunity to share the total costs among several agencies. Costs vary, depending upon the method of data collection (i.e., mail-out, telephone interview, personal interview), the length of the questionnaire and the size of the sample.	COST
Personnel involved in various phases of a general population survey should have experience in sampling procedures, questionnaire development, data analysis and report preparation. Trained interviewers will also be necessary if a telephone or personal interview approach is used. A minimum of one-half time professional, one-quarter time secretarial and some temporary clerical assistance should be allocated for the duration of the survey. Interviewers can be hired or trained on a temporary basis. Inter-agency involvement can reduce the vocational education staff requirements.	STAFF
The duration of the survey will depend heavily upon the size of the sample, the method of data collection and the number of people conducting interviews (if applicable). Expect a minimum of three months and a maximum of one year.	TIME

A general population survey usually will involve a sample of sufficient size to require automated data processing. If a telephone interviewing approach is utilized, space and telephone lines will be needed for the interviewers during data collection.	EQUIPMENT FACILITIES
A sampling plan will need to be developed which identifies the individuals or households to be included in the survey. The size of the total sample will need to be increased when members of the special population(s) can not be identified prior to data collection.	PARTICIPANTS
A general population survey can provide information on several special populations of potential interest to the State agency. The approach is most suitable when the special population(s) represent a significant segment of the general population, or when a sampling plan has been developed which ensures adequate representation of each special population of concern to the State agency.	APPLICATIONS
A population survey will promote public awareness of vocational education. Questionnaire items which are directed to the needs of special populations will help to demonstrate to respondents the State's interest in improving the delivery of services to those segments of the population.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

IDENTIFY SPECIAL POPULATIONS OF CONCERN TO THE STATE AGENCY

A general population survey can provide information on a number of special populations if these populations are defined prior to the collection of survey data. Thus the State agency should identify all special populations of concern to it so that data can be collected and subsequently reported on each of those populations.

State agency staff are likely to have a number of ideas concerning special populations whose needs should be assessed. A brainstorming session offers a quick and effective approach for agency personnel to use to delineate various special populations. (Brainstorming is discussed in Chapter Five, Section I of the E.S.P. System.) An alternative approach is to review existing data (e.g., enrollment trends, program completion rates, unemployment rates, etc.) to identify segments of the population which appear to have special needs for vocational education programs or associated supportive services.

STEP 2

DEFINE STATE AGENCY INFORMATION NEEDS REGARDING THE SPECIAL POPULATIONS

For each special population identified in Step 1 the State agency will have to determine the types of information it needs to plan more effectively for the delivery of services to those populations. The types of information needed are likely to differ among the various special populations, thus information needs should be classified by special population categories. Commonalities of information needs across the categories should then be determined and

flagged for priority consideration during the development of the survey instruments or during discussions with other State agencies involved in the general population survey.

The initial identification of agency information needs can be prepared in a topical format or as questions which the agency would like answered. Topics or questions take less time to identify than do the actual survey questionnaire items, and yet they provide enough substance for review and discussion by agency personnel.

STEP 3

DEVELOP SAMPLING PLAN

A sampling plan will need to be developed which ensures adequate representation of the general population as well as the special populations of concern to the State vocational education agency. If the special populations are expected to account for a very small percentage of the general populations, it will probably be necessary to use disproportionate sampling in order to include an adequate number of special population representatives. The alternative to disproportionate sampling is to enlarge the total sample size to the point where a reasonable number of special population representatives would be expected (by chance alone) to be included in the sample. However, the latter approach will be much more expensive than disproportionate sampling since the number of non-special population persons included in the sample would be much larger than necessary.

Disproportionate sampling and weighting procedures are inherently complex and therefore should not be undertaken without the involvement of someone who thoroughly understands the procedures and their implications on subsequent data analyses. Their impact on data analyses will be lessened if the data on special populations are to be analyzed separately from that on the rest of the general population. If the data are to be combined during analyses, weighting procedures will need to be used to adjust for the disproportionate representation of special populations.

Once the agency's information needs have been identified, it will be necessary to develop questionnaire items which accurately obtain the desired information. Items will need to be developed into a complete questionnaire unless another State agency is assuming responsibility for instrument development.

Items should be stated as simply as possible and particular attention should be given to keeping them free of ambiguity. Items with multiple choice response categories will be easiest to analyze but care must be taken to ensure that the response alternatives are consistent with the needs of special populations.

If automatic data processing is to be used, then a person knowledgeable of the requirements of the data processing system should be consulted with during development of the questionnaire. Open-ended responses to survey questionnaire items will require interpretation, classification and codification prior to computer processing or analyses.

The format of the items will vary depending upon whether the instrument is to be administered by telephone interviews, in-person interviews or by mail. The reading/vocabulary level of the items is important in all three methods but is most important with the mail-out approach. Questions which allow for open-ended responses are much easier to handle in an interviewing approach than in a mail-out, and oftentimes can be classified by the interviewer at the time of the interview. If an interview approach is decided upon, interviewers will need to be trained or hired so that questions are asked consistently and interviewer bias is minimized.

If the vocational education agency will be structuring the items into a questionnaire, it should be constructed in such a way as to gather the required information as quickly and concisely as possible with minimal inconvenience to the respondent. The ordering of the items should be such as to allow for a smooth flow through the questionnaire. Start with the least threatening items, leaving any sensitive items to the last. Transitional statements should accompany any shifts in content emphasis.

A pretest of the questionnaire may be accomplished with as few as 10-15 respondents representing each special population of concern to the State agency. The pretest results will normally flag those items which are difficult for the respondents to answer, which are awkward in terms of sequencing, etc. The length of time for administration of the questionnaire can also be gauged from the pretest and may indicate an opportunity to expand or a need to reduce the length of the questionnaire.

STEP 5

CONDUCT THE SURVEY

The actual conduct of the survey can begin as soon as the questionnaire and sampling plan are finalized. If potential respondents have been identified by name and address prior to the survey, one of the first steps in conducting the survey should be to notify the sample by letter as to:

- the purpose of the survey;
- how they will be contacted;
- the identity of the agency(ies) conducting the survey;
- the name and phone number of a contact person within the agency who they might call (collect or toll-free) for further information; and
- assurance that the information will be kept confidential.

It would be best to mail this letter no more than two weeks prior to the start of the actual data collection and no less than one week before. It is possible with the one-week lag to use the letter as a control mechanism for determining who has moved, died, refuses to cooperate, etc. Proper records-keeping at this stage of the survey can save the agency time and money during subsequent survey activities.

If interviewers are to be used, they should be thoroughly trained in the administration of the questionnaire prior to beginning the survey effort. This might entail

travel on the part of the interviewers and/or State agency staff, and therefore could be an additional budgetary consideration.

Both telephone and in-person interviewing will probably require a concentration of effort during the late afternoons, early evenings and on weekends. It is best at the outset to define for the interviewers the number of attempts that should be made to contact an individual or household prior to classifying them as unreachable; five telephone attempts and three in-person attempts are reasonable limits, as a rule.

When using a mail-out survey questionnaire, at least one month should be allowed for data collection activities. Each questionnaire should be accompanied by a cover letter explaining the purpose of the survey and requesting the person's cooperation. Personally signed letters generally increase the response rate. If respondents can be identified from their questionnaires, records should be kept of undeliverable returns from the post office and respondents who have completed their questionnaires. After about two weeks, a follow-up postcard should be sent to the remaining, unheard-from members of the sample. After another two weeks, a second follow-up letter along with a copy of the questionnaire and return-addressed, stamped envelope should be sent to those members of the sample who have yet to be accounted for.

STEP 6

PROCESS AND ANALYZE THE SURVEY DATA

Preparation for the processing and analysis of the survey data can begin as soon as the final form of the questionnaire is devised. Survey data can be processed either by hand or with automated data processing equipment. The latter will probably be necessary for processing the number of questionnaires generally associated with population surveys.

To ensure valid results, range checks should be performed to identify any responses which are outside the range of allowable responses. For example, if an individual was asked to indicate the number of days per week he was employed, and responded with 40, it would have to be deleted or brought into the acceptable range of 0-7.

Questionnaires which contain open-ended responses will need to be reviewed individually and the responses codified if the data are to be automatically processed. Nonsense or suspect responses (e.g., respondent's age is 2 years; desires training to become a knight) should be screened out or reconciled before the data are analyzed.

If automated data processing is used, each questionnaire should be assigned a unique identification number so that it can be checked against its computer record. A random check of about 10 percent of the computer records against their respective questionnaires should be performed to determine the extent to which data entry errors are occurring. If such errors are discovered, the agency might wish to conduct a 100 percent check of computer records against questionnaires to verify their accuracy and correct any errors in the data set.

Initial analyses to be performed upon the data should be kept simple (e.g., frequency distributions, percentages, means, etc.). Further analyses should be guided by the previously identified information needs of the agency. Care should be taken prior to performing statistical tests for differences between groups, since the validity of the results depends upon meeting specific assumptions underlying the statistical procedures. If the agency desires to perform analyses such as t-tests, analysis of variance or chi-square, it is advisable that someone be involved who understands statistics and knows how to interpret the results of the analyses.

STEP 7

REPORT THE RESULTS

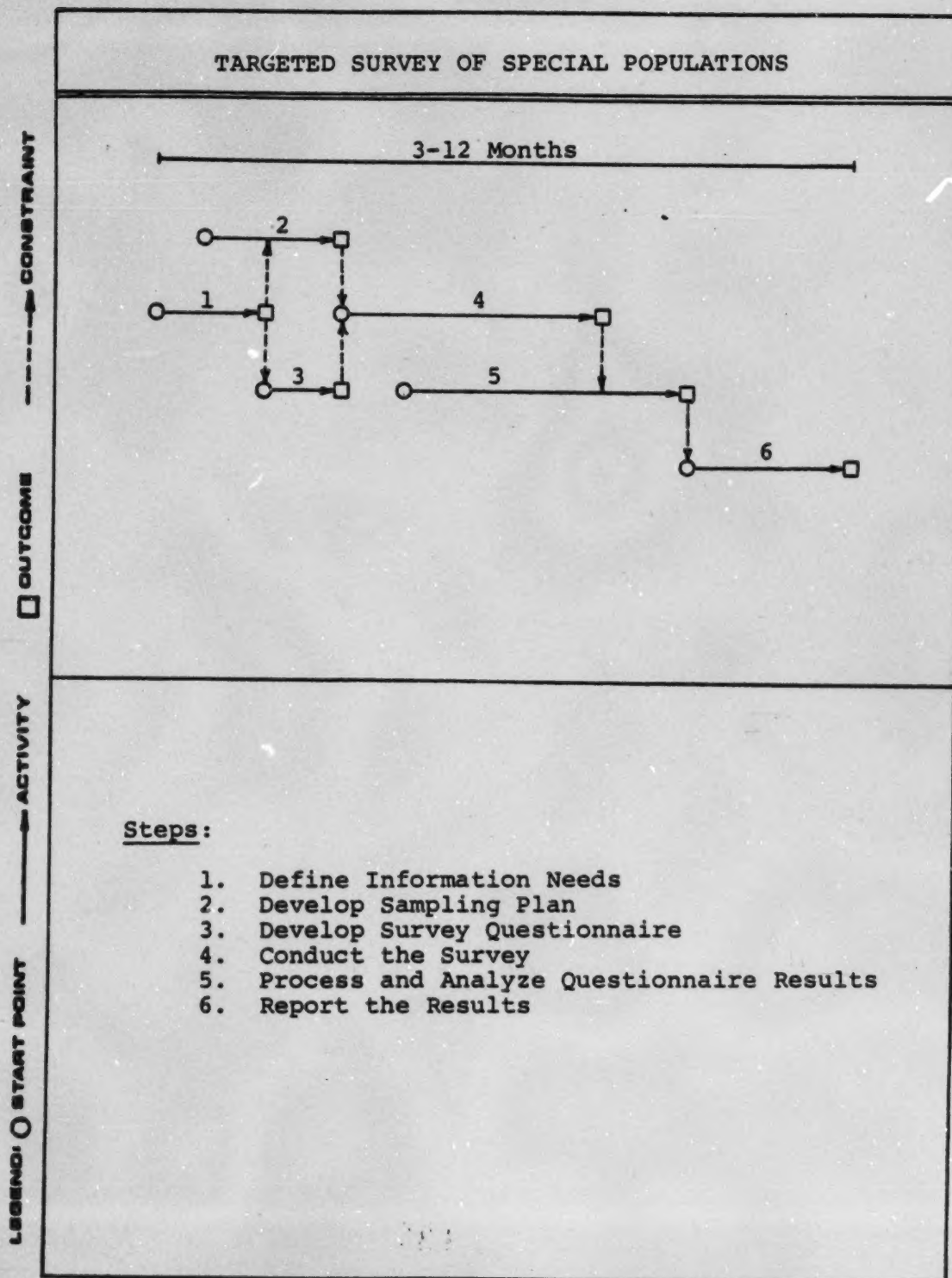
Results of the analyses of the survey data will need to be reported and interpreted if they are to be of maximum benefit to the agency. If the agency assesses its information needs prior to conducting the survey, then the types of issues or questions of major concern should be known before the survey report is written. The report should address the issues or questions identified for each of the various special populations. Results should be presented and interpreted in a format which facilitates the subsequent development of goals pertaining to the special populations.

The characteristics and decision-making responsibilities of the intended readers should be kept in mind throughout the preparation of the report. If there is considerable disparity among recipients as to the amount of detail needed, then consideration should be given to preparing a synopsis of the report for distribution to those individuals who require (or would prefer) a less detailed presentation of the findings.

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TARGETED SURVEY OF SPECIAL POPULATIONS



OVERVIEW

Targeted surveys of special populations are intended to focus exclusively on one or more special populations of concern to the State agency. Because of this, the size of the total sample and associated costs of the survey are less than would be the case for a general population survey. However, since targeted surveys do not collect data on the general populations, they do not allow for the needs of special populations to be compared with the needs of the general population. Whether or not this represents a disadvantage to the State agency will depend upon the agency's information needs.

Preparation for a targeted survey of special populations will require identification of the special populations of concern to the State agency, specification of the information needed on those populations, development of a sampling plan, and development of a survey questionnaire. Pre-tested survey questionnaires will then be mailed to respondents or used in conjunction with an interview approach. Completed questionnaires will need to be screened or checked for completeness prior to the data analysis. After the analysis of the data, the results should be documented and interpreted in a written report.

KEY CONSIDERATIONS

Surveys of out-of-school special populations are one of the more costly approaches for assessing needs. Costs include staff time, data processing and reproduction. Other costs associated with the survey will depend upon the method of data collection (mail-out, telephone interview, personal interview), the size of the sample, the length of the questionnaire, and the effort required to identify members of the special population.	COST
Personnel involved in various phases of the survey should have experience in questionnaire development, statistical sampling procedures, data analysis and report preparation. Some approaches will also require the involvement of experienced interviewers or an individual who can train interviewers. A minimum of one-half time professional, one-quarter time secretarial and some temporary clerical assistance should be allocated for the duration of the survey.	STAFF
The duration of the needs assessment will vary considerably with the size of the sample and the method of data collection. Expect a minimum of three months, a maximum of one year.	TIME

Automated data process equipment will facilitate the analysis of the data. If a telephone interview approach is utilized, telephones and a work space will be needed for each interviewer. WATS lines might prove cost effective for larger surveys.	EQUIPMENT FACILITIES
A sampling plan will need to be developed to identify and select respondents for inclusion in the survey. Respondents will need to be representative of the special population(s) under study.	PARTICIPANTS
Targeted surveys can focus on any special population whose members can be identified prior to collection of the survey data. The survey can be state-wide, or can focus on particular sub-state areas with a known concentration of the special population.	APPLICATIONS
A targeted population survey will inform members of the special population(s) of the State agency's interest in improving the delivery of services to that population(s).	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

DEFINE INFORMATION NEEDS

A State agency which decides to conduct a survey to assess the needs of special populations will first have to determine which special populations are of greatest concern to the agency and the types of information about those populations which will be of greatest utility to the agency in planning for the delivery of services. A review of recent enrollment patterns can sometimes provide information on the underrepresentation of certain segments of the population in vocational programs. Likewise, a review of existing data sources can serve to focus attention on existing informational shortages and to avoid the possibility of collecting data which are available from other sources.

The initial identification of agency information needs can be prepared in a topical format or as questions which the agency would like answered. Topics or questions take less time to identify than do the actual survey questionnaire items, and yet they provide enough substance for review and discussion by agency personnel.

STEP 2

DEVELOP SAMPLING PLAN

A sampling plan will need to be developed to ensure that there will be adequate representation of the special populations of greatest concern to the State agency. The sampling plan should specify the numbers of people representing special populations to be included in the sample and the procedure(s) which will be used to select those representatives from the population. The following outline summarizes a number of factors to consider when setting the size of the desired sample.

CONSIDERATIONS FOR SETTING SAMPLE SIZE

1. The accuracy of the information will increase as the sample size becomes larger. Too small a sample can result in erroneous estimates of special population needs; however, too large a sample can result in greater precision than necessary and a considerable increase in data collection costs.
2. A larger sample will be needed when there is greater heterogeneity among members of the special population (e.g., the handicapped).
3. Larger samples will be needed when the data on special populations are to be reported or analyzed by categories (e.g., by sex, race, age group, handicapping condition, etc.).
4. A larger sample will be needed when it is expected that not all respondents will qualify as members of the special population. This is likely to be the case when the respondents' qualifying condition(s) cannot be determined with certainty prior to data collections (e.g., homemakers wishing to re-enter the labor force, persons of limited English-speaking ability, etc.).

The identification and selection of persons to be included in the needs assessment survey is likely to require some deviations from recommended probability sampling techniques. One of the basic principles of probability sampling is that "the sample will be representative of the population from which it is selected if all members of the population have an equal chance of being selected in the sample" (Babbie, 1973). In the case of special populations, it is highly unlikely that all of the members of the special population can be identified, and thus they will not have an equal probability of being included in the sample. However, there are likely to be existing sources of information which can be used to identify many members of various special populations. Some sample sources are presented in the following table.

POTENTIAL SOURCES FOR IDENTIFYING SPECIAL POPULATIONS

Information Sources	Target Population
Employment Security Commission	Unemployed workers who were formerly employed in low paying jobs
Department of Vocational Rehabilitation Employment Security Commission Disability Determination Section of Department of Social Services	Handicapped Persons
Income Tax Division	Single heads-of-household with marginal incomes
Department of Social Services	Economically disadvantaged receiving public assistance
Division of Probation and Parole	Inmates and ex-offenders
Local centers for abused women YWCA's Counseling centers for women	Displaced Homemakers

Once the names and locations of potential survey respondents have been identified, a sampling procedure will probably be needed to select specific persons or households for inclusion in the needs assessment. There are a number of probabilistic sampling procedures which should be considered in light of agency resources and the available information on the special population whose needs are being assessed (e.g., simple random sampling, systematic sample selection, cluster sampling, multi-stage sampling, etc.). Since the relative advantages and disadvantages of each approach is beyond the scope of this work, the reader is referred to the following sources for additional information: Babbie, 1973; Ackoff, 1953; Warwick and Lininger, 1975; Kish, 1965.

In contrast to the probability sampling procedures described above, it is possible for a special population needs assessment to be conducted without first identifying most of the members of the population and then selecting representatives from that sampling frame. While sampling theorists generally frown on non-probability approaches, such an approach offers an alternative when probability sampling is not deemed feasible by the State agency.

An example of a non-probability sampling procedure would be to identify and contact Local service agencies which deal with the special population of interest to the State agency and to have Local agency personnel assist in the selection of respondents. If the special population of interest to the State agency was displaced homemakers, for example, the State agency might wish to seek cooperation and assistance from centers for abused women, counseling centers for women, Local employment service offices, YWCAs, etc.

The reader should be cautioned about the possibility of over- or under-estimating the needs of a special population when a non-probability sampling procedure is used. Such approaches are probably better suited for estimating the types of support services which a special population needs rather than for estimating the exact extent to which those services are needed.

STEP 3**DEVELOP SURVEY QUESTIONNAIRE**

Once information needs have been identified, an instrument must be devised to accurately obtain the needed information. It is best at the outset to have input from someone who thoroughly understands data analysis on devising the questionnaire in such a way as to render the needed information as simply as possible. Another necessary part of overall instrument development is a decision on how the data are to be processed; e.g., by hand or by automatic data processing. If automatic data processing is to be used, then a person knowledgeable as to the requirements of the particular system to be utilized should also provide input. The size of the sample, the type of questions asked (e.g., open-ended, yes-no, true-false, etc.), the amount of money available for data processing, and the processing resources available to the agency are all important factors in deciding how to ultimately process the data. The method should then be kept in mind when devising the questionnaire.

Another important consideration in instrument development is the data collection technique to be used. With adult, out-of-school populations, any of three basic methods or any combination of these methods may be used:

- (1) telephone interviews;
- (2) in-person interviews; and
- (3) mail-out.

The reading level of the questionnaire is important in all three methods, but is most important with the mail-out approach.

The mail-out method is generally the least expensive. It also allows the respondent to complete the questionnaire at his/her leisure more so than the telephone or in-person approach. The following points are important to remember in considering the mail-out method for administration:

CHARACTERISTICS OF THE MAIL-OUT METHOD

- The reading level of the instrument is crucial.
- The response or return rate generally will be lower than for an interview approach.
- If not to be completed by a particular person in a household, it may yield more female respondents.
- The bulk of the instrument should not be such as to overwhelm the respondent at the outset.
- Instructions must be complete as to who should complete the questionnaire and how.
- The mail-out approach is apt to yield respondents of higher income level and greater educational attainment within the sample, thereby perhaps producing a bias in addition to the female bias noted above.
- If automatic data processing is to be used, the information may have to be transposed before data entry.
- A postcard follow-up and at least one subsequent reminder with an additional copy of the questionnaire are ideal for the best return rate.
- Respondents should not be requested to provide postage.

The telephone survey generally costs more than the mail-out method in that interviewers must be trained and, perhaps, hired to administer the instrument, WATS lines must be used, telephone numbers must be looked up, etc. A major advantage of the telephone approach is the person-to-person contact offered. Other considerations of the approach are:

CHARACTERISTICS OF THE TELEPHONE APPROACH

- It affords a limited ability to trace individuals within a certain geographic area: specifically, the address and telephone number of the individual or household may have changed since the sample frame was created but may be traceable through telephone sources.
- Low income households may not have telephones in large proportions; therefore a telephone survey can bias the returns.
- The length of time that a respondent can be kept on the telephone is limited--plan on absolutely no more than 40 minutes per interview.
- The method is usually more compatible with automatic data processing than the mail-out form.
- The volume of questions is not as important as the length of time involved.
- The person-to-person contact can allow better comprehension of the items through explanation by the interviewer.
- The completion rate will probably be no better than 65 percent of the original sample.

The in-person method is usually the most expensive of the three methods in that it involves travel expenses and additional time on the part of the interviewer; aside from that, the considerations for this technique are about the same as that for the telephone approach. A distinct disadvantage of the method can be, depending on the population surveyed, the environment into which the interviewer must be sent.

Once consideration of data analysis, data processing, and interview technique has been accomplished, the questionnaire can be fully developed. As a rule, there are four basic steps involved.

QUESTIONNAIRE DEVELOPMENT STEPS
1. <u>Item writing</u> - dictated by the needs assessment and known sample characteristics (if any) 2. <u>Item ordering</u> - to accomplish flow 3. <u>A pretest or preadministration</u> - given to a sample of the population 4. <u>Item Rewrite and Reordering</u>

The items that comprise the questionnaire should be constructed in such a way as to gather the required information as quickly and concisely as possible with minimal inconvenience to the respondent. Again, the lowest reading level of the target population must be taken into consideration. If it is a limited English-speaking population to be surveyed, the printing of all elements of the questionnaire should be in both languages involved.

The ordering of items should be such as to allow a smooth flow through the questionnaire, with transitional statements--given in conversational form--accompanying any shifts in content emphasis. The placement of potentially threatening items and/or particularly sensitive items (such as race, income, etc.) is an important consideration and may vary with the population surveyed.

A pretest of the questionnaire may be accomplished with as few as 15 respondents, but these should be as similar to the population surveyed as possible, at least with respect to educational level and probable income level. The pretest results will normally flag items which are difficult for the respondent to comprehend, which are awkward in terms of sequencing, etc. The rewriting and reordering of items will often be dictated by pretest difficulties. The length of time of administration will also be gauged from the actual pretest and may allow expansion or dictate item deletion. Unless the agency has a great deal of time for development purposes, it is not recommended that the mail-out method of administration be attempted on pretest.

The final form of the questionnaire should allow for "nonresponses" in the response for each item, as a rule. These take the form of omitted items, items that the respondent refuses to answer, and don't know responses to items. Refused response modes need not be included on the mail-out form.

STEP 4

CONDUCT THE SURVEY

The actual conduct of the survey can be accomplished soon after the completion of Step 3 above. One of the first steps in conducting the survey should be to notify the sample by letter as to:

- the purpose of the survey;
- how they will be contacted;
- the identity of the agency conducting the survey;
- the identity of a contact person or persons at the agency level whom they might call for further information (a toll-free number should be obtained and used); and
- assurance of confidentiality and a brief description of the method by which it will be maintained.

It would be best to mail this letter no more than two weeks prior to the start of the actual data collection and no less than one week before. It is possible with the one-week lag to use the letter as a control mechanism, thereby determining, for example, whether people have moved, died, refuse to respond, etc. Proper records-keeping at this point can and probably will save the agency money during subsequent survey actions.

If interviewers are to be used, they should be thoroughly trained in the administration of the instrument prior to the beginning of the survey effort. This might, depending on the method of administration, involve travel on the part of the interviewers and/or State agency staff and could therefore be a significant budget item.

Once all of the above has been accomplished, the actual interviewing can begin. Telephone interviewing might best be accomplished in the late afternoon and evening and/or on the weekends. At least two calls will normally be required, one to establish an appointed time for completion and then the actual interview call.

In-person interviews could possibly be done exclusively during the daytime, but more likely will involve daytime, evening and weekend work by the interviewers. The amount of travel required by the interviewer could vary greatly, with multiple trips to a location required, tracing an individual if allowed for, etc.

It is best at the outset to define for the interviewers the number of attempts that will be made to contact a member of the sample prior to classifying that member as unreachable; five telephone attempts and three in-person attempts are reasonable limits, as a rule. Also, plan for how to handle and/or record refusals, sample members who have moved, how far to trace the latter, etc.

When using the mail-out method, at least one month should be allowed for data collection activities. Send out the survey with an appropriate cover letter and instructions to the respondent for completion. Keep records of any returns from the post office and strike these from the mail-out lists. Also keep records as to which members of the sample returned the questionnaire complete, incomplete, etc. After about ten days from the initial mailing, send out a follow-up postcard to the remaining, unheard-from members of the sample. Continue to keep records of returns and after about ten more days send an additional follow-up letter with another copy of the questionnaire attached, along with a return envelope that has prepaid postage, to those remaining sample members.

Establish a date for the end of the interview effort and allow returns only through that period. Late returns from the mail-out method are normal, but need not be included in the final data base unless they are in large numbers.

STEP 5

PROCESS AND ANALYZE QUESTIONNAIRE RESULTS

Preparation for the processing and analyses of the obtained data can begin as soon as the final form of the questionnaire is devised. The decision as to how to process the data and the congruence of items with information needs will have been accomplished in Step 3, so that proper editing procedures and analyses plans can be established. The processing of the data should include, at a minimum, the steps outlined below.

DATA PROCESSING PROCEDURES

- In as much detail as possible, account for the sample surveyed in terms of, for example, the number of potential respondents who refused to answer the questionnaire, the number who could not be located, the number returned incomplete, the number complete, the number moved out-of-state, etc. This can be valuable information to the agency in the planning of subsequent surveys.
- As implied above, screen the questionnaire for completeness. Depending on the method of administration used, this can be accomplished during the interviewing. The agency may be forced to establish minimum completeness criteria for the inclusion of a questionnaire in the final data base.

DATA PROCESSING PROCEDURES (Cont'd)

- In the case of open-ended items, a code scheme should be built, usually, if the data are to be automatically processed. If not, such items can usually be processed directly without resorting to a code, unless a numerical algorithm is involved.
- "Nonsense" responses should be screened out and reconciled before additional processing.
- Range checks should be performed on each item to determine conformance to the response mode and/or to logical expectations. (As an extreme example, an age response of "2 years old" might well be considered suspect.) The presence of out-of-range values in the data fields can have profound results on interpretation.
- Conformance to skip patterns (e.g., if a person answers item number three "yes" then item number four should be skipped) should be checked. Practicality is a key factor in this respect; if time allows, an editor can go to the actual questionnaire and resolve a skip pattern violation. If not, then the master item (in the example above, item three) should rule.
- In general, make sure that all questionnaires in the data set have logical responses to all items.
- If automatic data processing is used, it is wise to perform a random check of about 10 percent of the computer records against the questionnaires themselves. If data entry errors manifest themselves in this process, the agency may wish to check more data records against the questionnaires. A 100 percent check of computer records against actual forms is not unheard of and may well be desirable at times.
- If automatic data processing is utilized, make sure that each questionnaire has a unique identification number so that it can be checked against its computer record.

The analyses of the survey responses should be kept as simple as possible. It would be best to consult with someone who thoroughly understands data and statistical methodology prior to the analysis of the data if such a person is not, in fact, charged with the overall project. It is important that the data fit the analysis plan in such a way as to provide meaningful and valid results. It is also, of course, of importance that inferences about the population under study not be made from insufficient sample size; it would be best to plan for standard error and confidence interval calculations along with the actual results-oriented analyses.

STEP 6

PREPARE A REPORT AND/OR PRESENTATION SUMMARIZING THE RESULTS

The audience for the results of the survey is an important consideration in preparing a presentation or report on the data. If there is considerable disparity among recipients as to the amount of detail needed, degree of statistical expertise, etc., as is usually the case, then the State agency should consider publishing more than one report on the data results. One volume could be a synopsis of the survey conclusions, accompanying concise statements of results with an interpretation (when needed) and appropriate visual displays such as bar graphs. The synopsis volume should be confined if at all possible to no more than 50 pages, but should still contain appropriate cautions about the use of the results in decision-making, limitations or biases in the obtained sample, etc.

An expanded volume could contain full technical treatment of the results, to include descriptive statistics where appropriate. This volume could show, for each information need measured by the survey instrument:

- the item or items used to measure the information need;
- the main statistic involved, such as the overall percent of "yes" responses or the mean of all responses;
- the standard error of the main statistic;

- the way in which the data were reduced to obtain the statistic;
- complete results by sub-category, if any are involved;
- an interpretation, in narrative form, of the results;
- comparison of the statistics with any external measures of the same or similar measure on different samples or populations (a validation procedure); and
- statements of limitations on data interpretation, other appropriate cautions, confidence intervals, etc.

This detailed treatment of each measure could follow an appropriate introduction section and narrative abstract and probably should be accompanied by charts where possible.

The detailed, expanded volume could also contain the following information, appendicized where possible:

- description of the sampling plan and appropriate justification;
- discussion of the obtained sample in relevant detail, with comparisons against known characteristics of the population, if any (It is here that the representativeness of the sample must be proven, if possible);
- map of the geographical area involved, if relevant;
- copy of the questionnaire; and
- supportive statistics to include nonresponse rates on each item.

If appropriate and feasible, a slide/tape presentation of the results might be considered a very desirable supplement to the written report(s) and could be very effective for briefing higher level officials, such as the State Board of Education, politicians, etc.

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SECTION 2

SURVEYS OF CURRENT STUDENTS' NEEDS

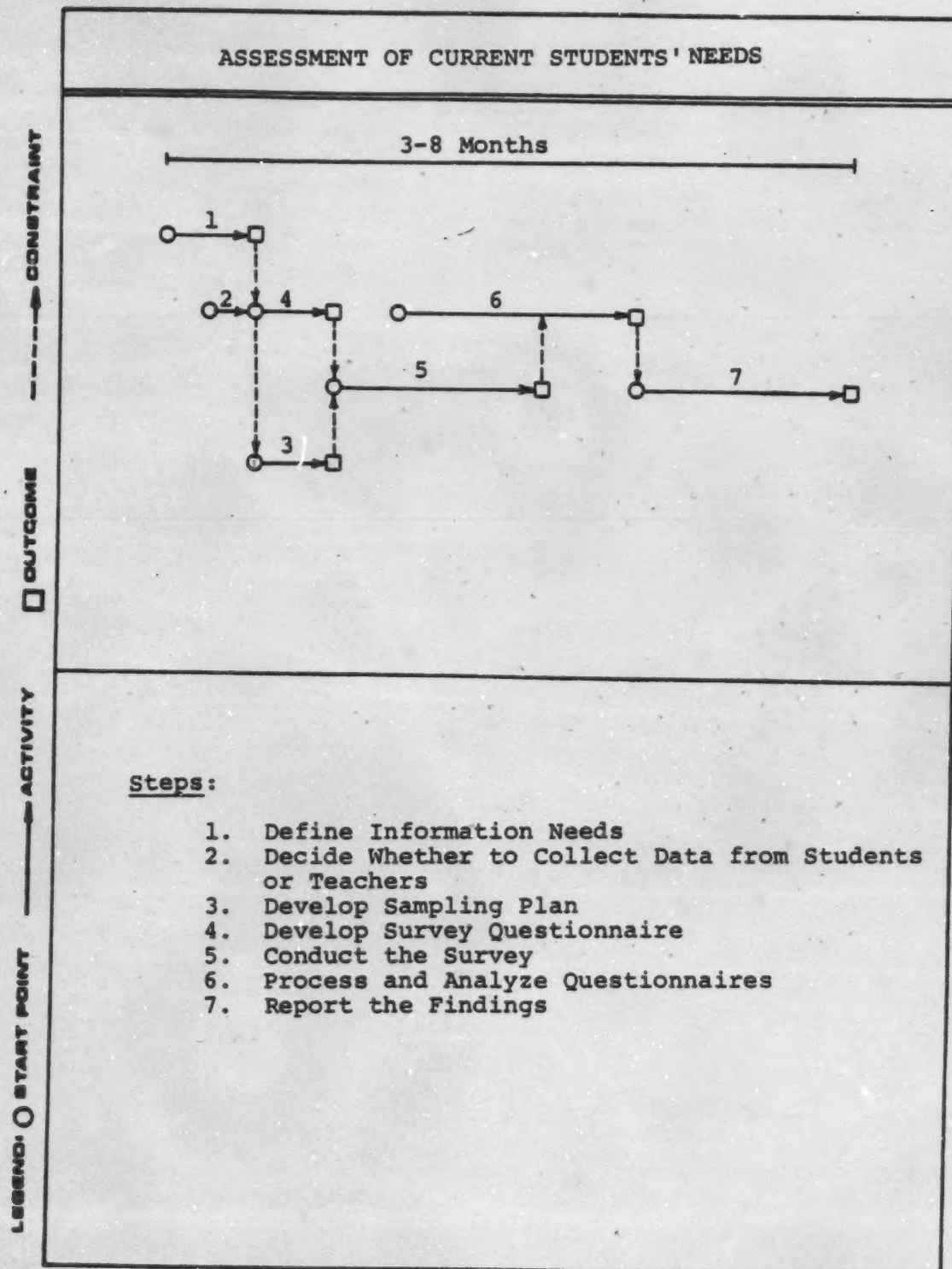
SURVEYS OF CURRENT STUDENTS' NEEDS

The second key activity within the needs assessment component of the Planning System is that the State agency periodically conduct surveys of students or school personnel in order to determine the needs of special populations enrolled in school. Such assessments are intended to complement a survey of the out-of-school population and to focus more specifically on needs, problems and barriers encountered after enrolling in school or in a vocational education program. As with a survey of the out-of-school population, the intent is to gather information which can serve as a basis for developing goals for improving the delivery of services to special populations.

Two alternative procedures are described for conducting surveys of the needs of in-school special populations. The first alternative is designed to collect data on an individualized student basis, either directly from the students or by having school personnel (teachers) complete a questionnaire on each special population student. The second alternative is less direct, and collects data on the general perceptions of school personnel concerning the needs of the special population. In this latter case the data are not reflective of individual students' needs, but rather they reflect more global perceptions of the characteristics and needs of the special population as a group.

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ASSESSMENT OF CURRENT STUDENTS' NEEDS



OVERVIEW

Assessments of students' needs can be conducted through the collection of data from the students or by having their teachers provide the necessary information. Either approach, as described in this section, necessitates the collection of data on individual students' needs.

The approach entails the identification of agency information needs, development of a sampling plan, development of a survey questionnaire, analysis of survey data and reporting the findings.

Involvement of local school personnel can vary from minimal effort to the actual completion of a questionnaire on each special population student enrolled in the school.

KEY CONSIDERATIONS

Expenses associated with a survey of the needs of current students generally are less than those required for assessing the needs of out-of-school populations. Less effort will be required to develop a sampling plan; mailing costs can be reduced substantially by bulk shipment of the questionnaires to the schools; and questionnaire administration can oftentimes be performed by local school personnel. Other costs associated with the assessment will include professional and clerical time, questionnaire reproduction, and computer time (optional).	COST
Depending upon the amount of support provided by local school personnel, a survey of current students' needs will require a minimum of one-third to one-half time professional for the duration of the assessment. Secretarial support will be necessary for preparation of the questionnaire, correspondence with local schools and preparation of the final report. Clerical involvement should be provided for processing the questionnaires. Additional professional assistance may be needed for questionnaire development, design of the sampling plan, and analysis and interpretation of the data.	STAFF
Depending upon the number of schools and students involved in the survey and the number of Local agency staff working on the survey, the duration of the needs assessment could range from three to eight months. More time may be required if the State agency is making direct contact with the students.	TIME

Access to computer facilities will be valuable for analysis of the data. Other than that, the survey should not require any special facilities or equipment beyond those routinely available to most State agencies.	EQUIPMENT FACILITIES
The selected sample of students should be representative of the special population(s) of concern to the State agency. Local school personnel should be involved in the administration of the questionnaires if the students are expected to have difficulty in completing the questionnaires themselves (e.g., handicapped, academically disadvantaged, limited English-speaking).	PARTICIPANTS
Surveys of the needs of special populations currently enrolled in school are applicable to any special population which is not systematically denied access to enrollment in vocational education programs. However, the approach could lead to an oversight of those barriers which are preventing special populations from enrolling in vocational education programs.	APPLICATIONS
If local schools are involved in the needs assessment, the survey is likely to increase local awareness of the State agency's concern for improving the delivery of services to special populations. Likewise, students involved in the survey can be expected to feel that vocational education is concerned about meeting their special needs. On the negative side, some local school personnel might feel that their involvement in the survey represents but another burden upon their time, with little likelihood that the results will be of benefit to them or their students.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

DEFINE INFORMATION NEEDS

The initial step in conducting an assessment of students' needs is to identify the types of information which will be of greatest utility to the agency in planning for the delivery of services. While the focus of the assessment is to collect information which can be used in the goal development process, it also provides an opportunity to collect additional information which can be used in subsequent phases of the planning process (e.g., development of objectives, identification of program services and activities, or allocation of funds).

In ascertaining agency information needs, a variety of topics or questions is likely to be raised which would be "nice to know." Each topic should be considered in light of current and future decisions which the agency will need to make. Topics which can be related to decision-making needs should be given priority consideration for inclusion in the assessment.

The initial identification of agency information needs can be prepared in a topical format or as questions which the agency would like answered. Topics or questions take less time to identify than do the actual survey questionnaire items, and yet they provide enough substance for review and discussion by agency personnel.

STEP 2

DECIDE WHETHER TO COLLECT DATA FROM STUDENTS OR THEIR TEACHERS

An assessment of students' needs can be performed through the collection of data from students or their teachers.

The decision concerning who should provide the information on students' needs should be made in light of the following considerations:

- the characteristics of the population which make it special
- the extent to which the students' characteristics might make them feel sensitive to being part of a targeted survey
- the extent to which the characteristics of the students might inhibit the collection of data directly from them (e.g., handicapping condition, limited English-speaking ability; academically disadvantaged, etc.)
- the ability of teachers to provide the information needed by the State agency

STEP 3

DEVELOP SAMPLING PLAN

Unless the State agency desires to conduct a needs assessment which includes all students representing the special population(s) under consideration, a sampling plan will be needed to define how the students are to be selected for inclusion in the assessment. If the needs assessment is intended to be used to target activities to specific LEAs within the State, then it would probably be advisable to sample students from each LEA. However, if the results of the needs assessment will not be used to target activities to specific LEAs, a multistage cluster sampling plan might be more cost beneficial to the State. Using such an approach, the agency would first select a sample of LEAs for inclusion in the assessment, and then have a sample of students or teachers selected from each of those LEAs. Such an approach does not require the State agency to first identify all students who might be included in the sample, but still allows each student the possibility of being included in the sample.

If LEA personnel are to assist in the identification or selection of students to be included in the sample, it

is essential that they be provided with specific criteria and procedures to follow in making the selection of students. The criteria should clearly define the types of students to be included in the assessment. The procedures should describe how the LEA is to select a sample of students from among those who meet the criteria for inclusion. In order to ensure that the data will be as accurate as possible, it is very important that the student selection procedure provided to the LEAs is consistent with probability sampling procedures. If probability sampling procedures are not used, the resulting data are almost certain to contain some misrepresentation due to a conscious or unconscious bias in the selection procedures used by LEA personnel.

It is also possible to develop a sampling plan which requires only minor involvement on the part of local school personnel. At the postsecondary level, for example, vocational schools could be asked to provide the names and addresses of all current students who meet certain selection criteria (e.g., women between the ages of 30 and 50 who were changing careers from that of homemaker to labor force participant). The State agency could then sample from the names provided, and mail survey questionnaires directly to each person selected for inclusion in the sample. While such an approach could reduce bias resulting from local sample selection procedures, it might increase bias if there is a poor response rate to the mail-out questionnaire. To judge the adequacy of the response rate for analysis and reporting purposes, one researcher (Babbie, 1973) suggests the following percentages be used as rough guides:

50% response rate = Adequate
60% response rate = Good
70%+ response rate = Very Good

The adequacy of the response rate will also depend upon the size of the original sample and the homogeneity of the special population under investigation. The greater the expected differences in needs among members of the special population, the larger the sample size should be. The reader is referred to the preceding description of a population needs assessment procedure for a delineation of considerations pertaining to setting the size of the sample. (See Section 1, Population Survey, Step 2.)

STEP 4**DEVELOP SURVEY QUESTIONNAIRE**

Developing a survey questionnaire for students in high schools or community colleges is similar in many respects to the procedures outlined in Step 3, Population Survey, Section 1. Reading level, again, is important if the students themselves are to complete the questionnaire. Printing of the instrument in two languages if the population surveyed is bilingual is also a good idea. The instrument should be concise and to-the-point, and should contain no more items than are absolutely necessary. If the schools keep good records on their students, and if some of the required information can be obtained from these records, then the State agency should do so instead of asking the students for it (such things as race, sex, age, etc.).

If the instrument is to be self-administered, then complete and definitive instructions should be on the instrument as to how to take the questionnaire, to whom the completed survey should be delivered, etc.

If the instrument is to be administered by the teachers, then complete interviewer instructions should be present on the survey. It would probably be best to plan on no more than a 20-minute questionnaire if administered by teachers. Any information that is needed on the students and is obtainable from teachers should be filled out by the latter; a section for teacher-supplied information could be inserted at the beginning of the questionnaire.

The pretesting of the survey is very important and should be accomplished as long before the actual surveying as possible. Once the pretest is complete, rewrite and reorder the items, make the form compatible with your data processing method (hand or automated), and reproduce the final instrument.

STEP 5**CONDUCT THE SURVEY**

As with the Population Survey (see Step 4, in Section 1), the students in the sample should be notified about the

impending survey in such a way as to elicit the most cooperation possible. An explanation as to why the survey is needed is a strongly-recommended part of such notification.

If teachers are to administer the instrument, give them a reasonable length of time in which to survey their students. In cases where the students themselves are to complete the questionnaire, give them one to three days to complete and return it if it is not required that they turn it in on the same day or during the same class period. It depends on the grade level/age of students, to a large extent, as to how much supervision and/or pressure must be placed on them to return the questionnaire, complete or incomplete. It is debatable whether completion of the survey at the high school level should be mandatory--if mandatory, the return rate might be very good and the validity of the obtained data very poor.

The screening of and accounting for returned questionnaires should be on-going during the actual survey effort both in order to alert the State agency as to problems and in order to facilitate data processing.

The quality of the data base is dictated by the instrument and by how the survey is conducted; proper planning and execution in these steps is most essential for valid results.

STEP 6

PROCESS AND ANALYZE QUESTIONNAIRES

Preparation for the processing and analyses of the data on students' needs can begin as soon as the final form of the questionnaire is devised. The processing of the data, whether by hand or by automated data processing, should include at least the following 4 substeps:

STEPS FOR PROCESSING ASSESSMENT DATA

1. Screen the returned questionnaires for completeness and establish minimum completeness criteria for the inclusion of a questionnaire in the data base.
2. Develop a coding system for open-ended items or items which allow responses to be entered in an "other" category.
3. Perform range checks to determine conformance to allowable response ranges or logical expectations. Make sure that all questionnaires in the data set have logical answers to all items.
4. Account for the student population surveyed in terms of number of returned questionnaires, number of incomplete returns, and number of school districts adequately represented in the sample.

The initial analyses performed upon the data should be kept simple, such as frequency distributions, means and percentages. It is advisable to consult with someone who thoroughly understands data and statistical methodology prior to performing statistical tests for differences between groups, since the validity of the results depends upon meeting specific assumptions underlying the statistical procedures. A statistical consultant is also helpful for assisting in the interpretation of the results of statistical analyses to ensure that erroneous statistical inferences are not made about the population(s) under study.

Keep the analysis plan flexible enough to allow for further analyses of the data to explore unanticipated findings.

STEP 7**REPORT THE FINDINGS**

Results of the student needs assessment will need to be reported and interpreted if they are to be of maximum utility to the agency. A written report will help to ensure that all appropriate agency personnel are informed of the findings, and will prevent the possibility of the information being lost as a result of personnel reassignments.

If the agency has determined its information needs prior to conducting the study, then the types of issues or topics of major concern should be known before the report is written. The report should address each of those concerns and present the findings in a manner which can be easily understood. Tables and graphs can enhance the readers' understanding of the results, whereas statistical jargon is likely to confuse many readers.

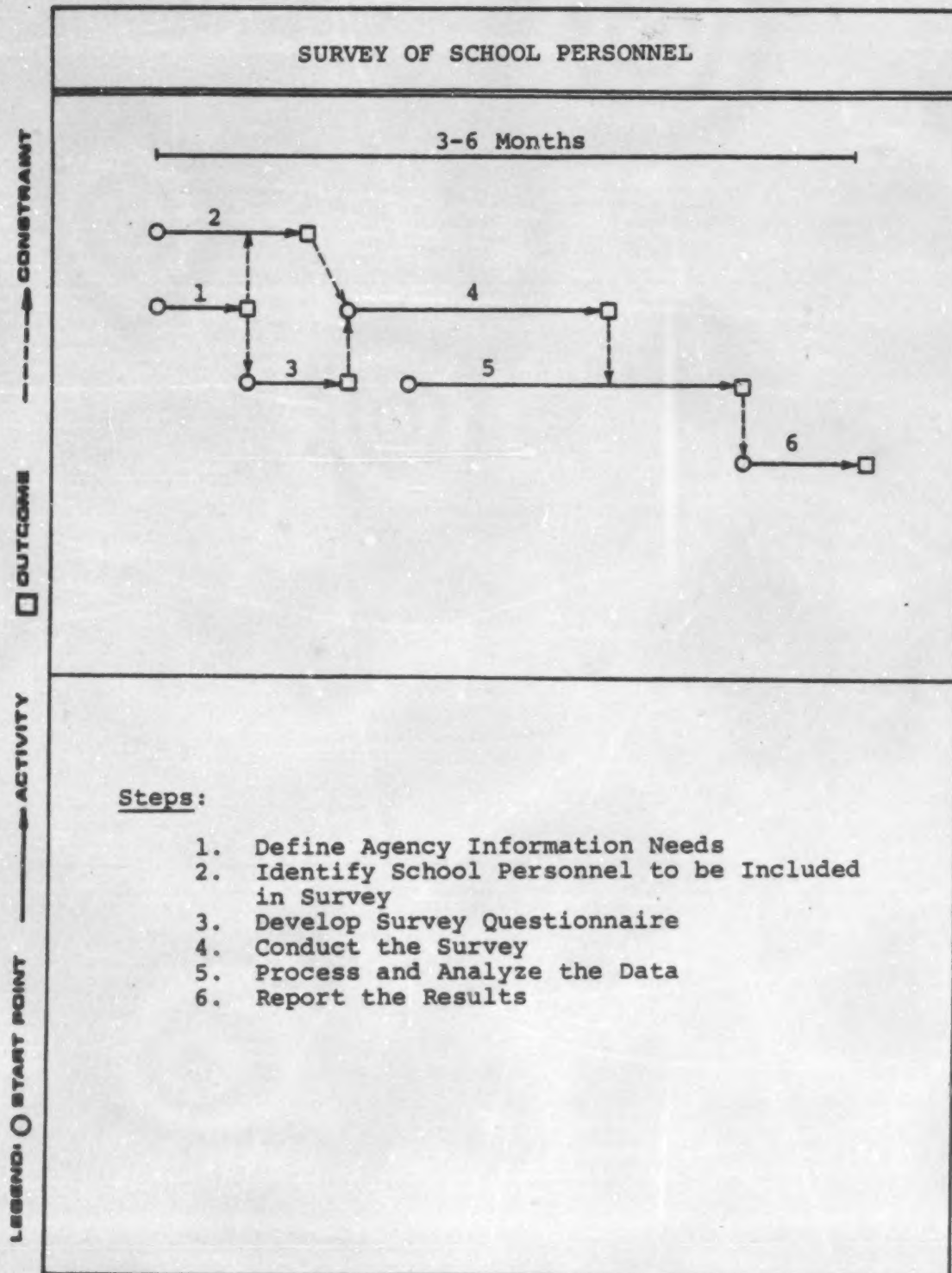
Keep the report as brief as possible without sacrificing the major findings and a discussion of their implications. Lengthy reports should include an abstract which summarizes the major findings. An abstract, synopsis or complete copy of the report should be sent to each participating school or school district to inform them of the results of the needs assessment and as an expression of appreciation for their assistance in the study.

If the report is to be disseminated to other agencies or organizations, a dissemination plan should be developed which identifies those agencies which should receive copies of the report or synopsis.

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SURVEY OF SCHOOL PERSONNEL



OVERVIEW

Surveys of school personnel can be used to assess the needs of special population students as perceived by the local school staff. Such surveys generally do not collect data on individual students; rather, the focus is on the teachers', counselors' or administrators' perceptions of the needs of the special population under consideration. Because of this, the local effort required to collect the data is considerably less than is the case when data are collected on specific students. However, the validity of the data collected on the basis of the perceptions of school personnel is always subject to some error resulting from misperceptions of students' needs and generalizations concerning special populations.

KEY CONSIDERATIONS

Surveys of school personnel represent one of the least expensive approaches for collecting data on the needs of special populations. State agency staff time will probably represent the primary cost of the survey. Mailing costs can be reduced by bulk shipment of the questionnaires to schools. Questionnaire reproduction and data analysis will also contribute to the cost of the survey.	COST
Depending upon the number of schools and local personnel included in the survey, the assessment requires between one-quarter and one-half time professional for the duration of the assessment. Secretarial support will be needed for preparation of the questionnaire, correspondence with schools and preparation of the report. Clerical assistance should be provided for processing the questionnaire. Additional professional time might be needed for assistance in designing the questionnaire, analyzing the data and interpreting the results.	STAFF
Total time required for the survey, including questionnaire development and reporting the results, can range from three to six months. The number of schools involved and the amount of time allowed for completion and return of the questionnaire will influence the amount of time required for completion of the survey.	TIME

No special facilities or equipment are required to conduct a survey of school personnel's perceptions of special populations' needs, although access to computer facilities will be valuable for analysis of the data.	EQUIPMENT FACILITIES
The sample of respondents should be selected to represent the various categories of school personnel who are likely to be most aware of the needs of special populations which the State is trying to identify. These personnel should be selected on the basis of the information needs of the State agency, and could therefore include teachers, special educators, counselors, administrators, admission and placement personnel, etc.	PARTICIPANTS
Surveys of school personnel are likely to be of greatest benefit when applied to special populations which constitute an identifiable segment of the existing student enrollment. Thus the assessment would be of greater utility in identifying the needs of the handicapped or limited English-speaking than would be the case for displaced homemakers or former correctional inmates.	APPLICATIONS
Contacts with school personnel will demonstrate the State agency's concern about improving the delivery of services to the special population(s) whose needs are being assessed. Some school personnel may resent having to spend their time completing a questionnaire for use by the State agency. Assurances of feedback to each local school can help to avoid this latter side-effect.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

DEFINE AGENCY INFORMATION NEEDS

The first step in preparing for a survey of school personnel is to determine the types of information which the agency needs pertaining to the special population(s) under study. Keeping in mind that the primary purpose of the survey is to assess the needs of the special population(s), the State agency should identify those issues or topical areas which would be indicative of special needs.

The initial identification of agency information needs can be prepared in a topical format or as a series of questions which the agency would like answered. Each topical area should be reviewed to determine the extent to which school personnel could provide accurate information which addresses the topical area. During subsequent stages of preparing for the survey the topical areas can be transformed into questionnaire items.

STEP 2

IDENTIFY SCHOOL PERSONNEL TO BE INCLUDED IN THE SURVEY

School personnel will need to be identified who are likely to be aware of the needs of the special population(s) of major concern to the State agency. In some States, directories of educational personnel will be available for various categories of personnel:

- special education teachers
- bilingual education teachers
- Local directors
- Local sex equity coordinators, etc.

Professional association directories can also provide a means for identifying local personnel who might be aware of the needs of special populations.

In the event that relevant directories or listings of personnel are not available at the State level, an alternative approach would be to have Local directors of vocational education identify the school personnel whom they believe would be best able to provide information on the needs of the special population(s). This can be done prior to the actual survey, or Local directors can be asked to distribute the survey questionnaire to the appropriate staff at the time of data collection.

A second consideration in the identification of local personnel to be included in the survey is the relative concentration of the special population(s) across school districts or planning regions. Existing enrollment data oftentimes can be used to target the survey at those districts with high population (e.g., limited English-speaking, economically disadvantaged, school dropouts or early leavers, etc.). By reviewing such data and selecting local personnel from those districts with concentrations of the special population(s), the State agency can avoid having survey questionnaires completed by local personnel who have had little or no contact with students representing the special population(s).

STEP 3

DEVELOP SURVEY QUESTIONNAIRE

In developing the survey questionnaire it is important to keep in mind that the respondents are being asked to provide information which reflects their perceptions of the needs of the special population. The accuracy of those perceptions will depend upon the respondents' prior experience in working or interacting with students representing the special populations. For that reason it is advisable to structure questionnaire items so that respondents do not feel obligated to answer any items which they do not feel qualified to answer.

Because the respondents are being asked to make generalizations about a particular segment of the student population, questions should be avoided which could be interpreted as representing biased or stereotyped attitudes. If the

questionnaire is to include items which pertain to sensitive issues, it is best to ask those questions after a series of non-threatening items.

Keep the questionnaire as brief as possible and only include items which can be justified on the basis of previously identified agency information needs. Pilot test the questionnaire to make sure that the items are not ambiguous, that the response format is appropriate and that the data are capable of being analyzed.

STEP 4

CONDUCT THE SURVEY

Prior to sending out the survey questionnaire to local personnel, each district superintendent and Local vocational education director should be informed of the upcoming survey and its purpose. They should be provided adequate time to notify district personnel of the survey prior to their receipt of any questionnaires.

Each questionnaire should be accompanied by a cover letter which explains the need for the survey and how the data will be used. A precise definition of the special population(s) should be included in the cover letter as well as the questionnaire. Explicit directions for completing the questionnaire and returning it by a specific date also should be provided.

If the district personnel are to return their completed questionnaire directly to the State agency, a stamped, self-addressed envelope should be attached to each questionnaire. If they are to return their questionnaire to another member of the district staff for forwarding to the State agency, an unstamped envelope should be attached to each questionnaire so that they can keep their responses confidential.

The State agency will need to decide whether or not it wants respondents to identify themselves on their questionnaires. By not being asked to identify themselves the respondents can be assured of anonymity; however, this would preclude the sending of follow-up letters or reminders to those individuals who do not return a questionnaire. If respondents are asked to identify themselves on their

questionnaires, it is important that they be assured that their responses will be kept confidential.

As an incentive to respondents to complete their questionnaires, the agency might consider offering them a copy of the results upon completion of the needs assessment. Respondents wishing a copy of the results should be asked to include their names and addresses on their completed questionnaires.

A procedure will need to be established for monitoring and processing the completed questionnaires upon their return to the State agency. If respondents are identifiable from their questionnaires, the agency should keep track of those individuals who have not returned questionnaires. A follow-up letter should be sent to them reminding them of the survey and again requesting their cooperation. Another copy of the questionnaire should accompany the follow-up letter so that misplaced questionnaires will not present an additional barrier to responding.

STEP 5

PROCESS AND ANALYZE THE DATA

Plans for processing and analyzing the survey data should be formulated in conjunction with the design and development of the survey questionnaire. There are two general methods for processing and analyzing the data: hand tabulation and automated data processing. Hand tabulation will be feasible only when there are a limited number of questionnaires and they are not too lengthy. As the number of questionnaires increases, hand tabulation becomes more time consuming and costly than would be the case for automated data processing. If statistical analyses are to be performed on the data, automated data processing becomes almost a necessity.

To ensure valid analyses, range checks should be performed to identify any responses which are outside of the range allowable in the response alternatives. For example, if an item was to be rated on a scale of importance ranging from 1 to 5, any response less than 1 or greater than 5 would need to be deleted or brought into range prior to analyzing the data.

Questionnaires which are to be processed by computer should be assigned unique identification numbers so that they can be checked against the computer records. Identification numbers can be assigned so that they also identify the school district of the respondent, the county where the respondent's school is located, etc. That would enable a large data set to be organized and easily analyzed by school district, county, etc., without requiring additional data fields for those purposes.

Survey data generally are suitable for analyses which determine frequency distributions, means and percentages. Care should be taken prior to performing statistical tests for differences between groups since the validity of the results depends upon meeting specific assumptions underlying the statistical procedures. If the agency desires to perform analyses such as t-tests, analysis of variance or chi-square, it is recommended that they involve someone who thoroughly understands statistical methodology and how to interpret the results of the analyses.

STEP 6

REPORT THE RESULTS

Results of the analyses of the survey data will need to be reported and interpreted in order to be of maximum benefit to the agency. If the agency assesses its information needs prior to conducting the survey, then the types of issues or questions of major concern should be known before the survey report is written. The report should address each of those concerns and present the findings in a manner which can be understood easily. Tables and graphs can enhance the readers' understanding of the results, whereas statistical jargon is likely to confuse many readers.

Keep the report as brief as possible without sacrificing the major findings and a discussion of their implications.

If the report is to be disseminated outside the agency, develop a dissemination plan which identifies the agencies and organizations which should receive copies of the report.

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- Babbie, Earl R. Survey Research Methods. Belmont, CA: Wadsworth Publishing Company, Inc., 1973.
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SECTION 3

ASSESSING NEEDS THROUGH ANALYSIS OF EXISTING DATA

ASSESSING NEEDS THROUGH ANALYSIS OF EXISTING DATA

The third and final key activity within the needs assessment component of the Planning System is that the State agency analyze existing socio-economic and demographic data in order to identify special populations in need of vocational education programs and support services. Such analyses are intended to augment, rather than replace, the information collected by surveying the in-school and out-of-school populations.

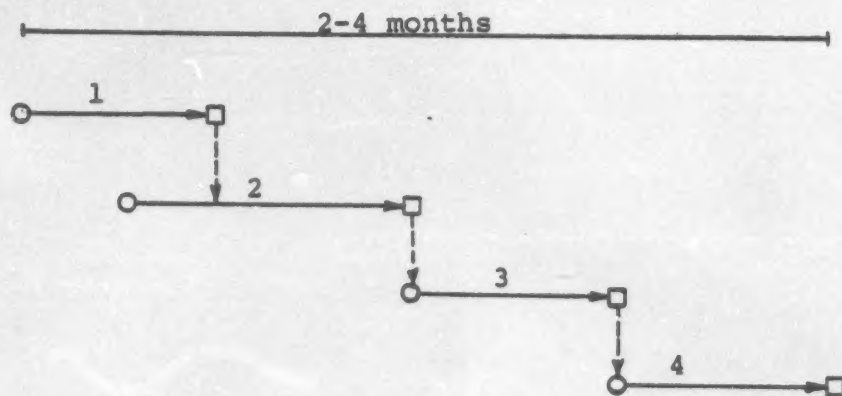
Within this section two alternative procedures are described for analyzing existing data pertaining to special populations. Each alternative is designed to serve a different function. The first alternative focuses on using existing data to identify segments of the State's population which have special needs for vocational education and supportive services. The emphasis of this approach is to identify special populations within the State. The second approach focuses on using existing data to determine the prevalence and characteristics of special populations which have been previously identified by the State agency (e.g., handicapped, disadvantaged, limited English-speaking, etc.). It therefore represents a more targeted investigation of the needs of one or more special populations.

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Analyzing the Prevalence and Characteristics of Special Populations Using Existing Data	
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**IDENTIFYING SPECIAL POPULATIONS
USING EXISTING DATA**

IDENTIFYING SPECIAL POPULATIONS USING EXISTING DATA

LEGEND: ○ START POINT — ACTIVITY □ OUTCOME - - - - - CONSTRAINT



Steps:

1. Develop Criteria for Identifying Special Needs Populations
2. Identify Sources which Contain Data on the Criteria
3. Analyze and Review Data to Identify Special Needs Populations
4. Report the Findings

OVERVIEW

Special populations can be characterized as being over- or underrepresented on indicators of economic or educational achievement relative to other segments of the population. One approach for identifying special populations is to review existing data which would indicate a potential need for vocational education to determine which segments of the population are overrepresented on the indicators of need. For example, if a population's relative unemployment rate is considered to be an indicator of its need for vocational education, then a review of existing data on characteristics of the unemployed might help to identify segments of the population with exceptionally high unemployment rates.

This type of approach for identifying special populations begins with the criteria for specialness and then identifies segments of the population which are over represented on those criteria. It enables the State to identify previously overlooked segments of society which have special needs for vocational education since it does not presuppose that all special populations have already been identified.

KEY CONSIDERATIONS

Personnel costs are the major expense associated with an analysis of existing data to identify special populations. In some instances there may also be costs incurred for computer analysis of existing data or for the purchase of data tapes from other agencies. Compared to survey approaches, an analysis of existing data is a relatively inexpensive approach for identifying special populations.	COST
It would be beneficial if the person(s) responsible for reviewing existing data had some familiarity with the data holdings of other State agencies. The amount of staff time required to conduct the assessment will depend upon the number of data sources available and reviewed, and whether or not data tapes can be analyzed by computer. One-quarter to one-half time professional for the duration of the assessment should be adequate.	STAFF
Locating and acquiring access to appropriate data sources will probably take 3-6 weeks; the total time required for the assessment could range from two to four months.	TIME

Access to computer facilities may be necessary to review data available on magnetic tape. Other than that, no special equipment or facilities are required to conduct a review of existing data.	EQUIPMENT FACILITIES
In addition to State vocational education personnel, it would be advisable to involve the Executive Director of the State Occupational Information Coordinating Committee and each of the State agencies represented on the SOICC.	PARTICIPANTS
A review of existing data to identify special populations is only capable of identifying those special populations which have been included in previous data collection efforts. The approach is most suitable for identifying segments of the population falling within typical socio-economic or demographic reporting categories (e.g., race, age, sex, level of education, etc.).	APPLICATIONS
The approach is likely to identify additional sources of data on special populations currently being served by the State vocational education agency. Improved linkages might be established with other State agencies.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

DEVELOP CRITERIA FOR IDENTIFYING SPECIAL NEEDS POPULATIONS

The initial step in identifying special populations using existing data is to develop the criteria or measures which will serve as indicators of populations with special needs for vocational education. Keeping in mind that the criteria will need to be consistent with data available to the State agency, it is recommended that the initial specification of criteria be kept rather general unless the individuals involved possess an awareness of data available from other State agencies. The general criteria might include such things as unemployment, high school drop-out rates, income below the poverty level, program completion rates, job placement rates, etc.

Since the specification of criteria will have a major impact on subsequent steps in the planning process, the criteria should be developed through a procedure which allows for input and review by persons outside of the State agency. Procedures such as the Delphi and Nominal Group could be used for that purpose; those procedures are described in Chapter Seven of this system.

STEP 2

IDENTIFY SOURCES WHICH CONTAIN DATA ON THE CRITERIA

The general criteria identified in Step 1 will need to be matched to existing data sources in order to identify populations with special needs for vocational education. In most States, the State Occupational Information Coordinating Committee (SOICC) would be an excellent contact point for determining the current availability of the necessary data. Other possibilities include statistical directories (which have been produced by some States), the Research and Analysis section of the State Employment Security Commission, and other State agencies not represented on the SOICC.

Contacts with possible sources of the necessary data can be made by either telephone or through mail-out requests. The types of data needed should be specified clearly and information should be requested concerning the descriptor or demographic variables associated with the data element. For example, if unemployment is identified as a criterion for identifying special needs populations, the State agency will need to know on what demographic variables can unemployment rates be classified, e.g., by sex, race, age, marital status, handicap, veteran status, urban/rural, etc.

A further consideration which will need to be explored concerning the availability of data is whether the data are currently in printed format or on computer data tapes but capable of being accessed. Data already in printed format will be the easiest to obtain, but data accessible by computer might prove more useful in analyzing needs. Unfortunately, access to other agencies' data tapes or the results of special analyses are not easily obtained. The SOICCs were established to facilitate the sharing of data in planning; thus, a request for special data tabulations might be received more favorable if it were channeled through the SOICC.

STEP 3

**ANALYZE AND REVIEW DATA TO IDENTIFY SPECIAL
NEEDS POPULATIONS**

The types of analyses which can be performed on the data will depend upon whether the data are in aggregated or non-aggregated format. The latter usually will require access to computer tapes or other data files, but should allow for a greater number of comparisons between various segments of the State's population.

If the data are in aggregated format such as found in tables or statistical reports, they might not require any further analysis in order to identify populations with disproportionately greater needs. Depending upon the types of aggregated data, statistical comparisons for differences between groups might be possible using non-parametric statistical tests such as chi square.

Data which are available in nonaggregated format on computer tapes offer a greater opportunity for exploring the differential needs of various segments of the population.

It will be necessary to involve someone who is thoroughly familiar with the format and accessibility of the data contained on tape in order to determine how the data can be retrieved, tabulated and presented. Confidentiality of individualized data records will need to be maintained when requesting access to data tapes belonging to another agency. However, the classifiers or descriptors contained on each individual's record probably will be of greatest importance in exploring the needs of various segments of the population, and tabulations classified by key descriptors (e.g., sex, race, handicapping condition, age group, etc.) can be performed without violating the confidentiality of the information.

STEP 4

REPORT THE FINDINGS

Results of the investigation should be documented in a written report suitable for use by decision makers within the agency. Such a report will enable the findings to be disseminated to multiple persons within the agency, and will ensure that the information is not lost should there be a change in personnel assignments.

The report should include a description of the purpose of the investigation, the sources of data analyzed, major findings and an interpretation of their implications. If the report cannot be kept brief, an abstract or summary of the major findings should also be included.

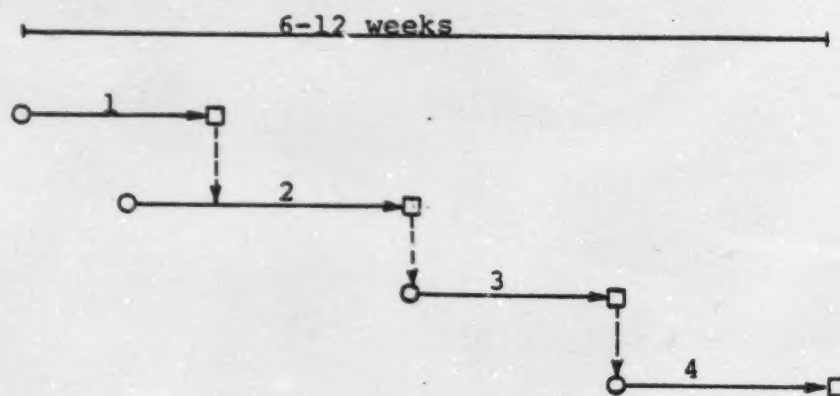
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U.S. Department of Health, Education and Welfare, Office of Education, Bureau of Occupational and Adult Education, Division of Vocational and Technical Education.
Resurge '79/Manual for Identifying and Serving the Disadvantaged and Handicapped Under the Vocational Education Amendments of 1976 (P.L. 94-482).
Washington, DC: Author, 1979.

**ANALYZING THE PREVALENCE AND
CHARACTERISTICS OF SPECIAL POPULATIONS
USING EXISTING DATA**

ANALYZING THE PREVALENCE AND CHARACTERISTICS OF SPECIAL POPULATIONS USING EXISTING DATA

LEGEND: ○ START POINT — ACTIVITY □ OUTCOME - - - CONSTRAINT



Steps:

1. Operationally Define the Special Needs Population(s)
2. Identify Available Sources of Data on the Special Population(s)
3. Analyze and Review Data
4. Report Findings

OVERVIEW

The prevalence of special populations already identified by the State agency can be assessed through a review and analysis of existing data sources. Such an approach presupposes that the special populations are known to the State agency, but more information is needed to determine their numbers, locations and needs. The handicapped, disadvantaged and limited English-speaking are typical of the types of special populations for which the State agency would like additional information on numbers and needs.

The definition of special populations (handicapped, disadvantaged, etc.) contained in PL 94-482 are not always the same as those used by other agencies in their data collection and reporting activities. As a result, the accuracy of estimates derived from existing data sources will need to be considered in light of definitional differences. The significance of such differences will depend upon the purposes for which the data will be used. However, the use of available data is much less costly than the collection of the specific data which are needed, and those cost savings should be considered when assessing the potential uses and shortcomings of existing data.

KEY CONSIDERATIONS

A review of existing data to determine the prevalence and characteristics of special populations previously identified by the State agency is one of the least expensive alternatives for assessing special population needs. Most of the costs will be associated with State agency personnel time and perhaps computer analysis of existing data. The amount of such costs will depend upon the particular special population under study and the format and amount of data available concerning that population.	COST
The review will be facilitated if the staff involved in it have some familiarity with the data holdings of other State agencies. The amount of staff time required will depend upon the number of data sources available for review and the number of special populations under investigation. One quarter-to one half-time professional for the duration of the project should be adequate.	STAFF
For a single special population, a review and analysis of existing data will take approximately six to twelve weeks; additional time will be required if more than one special population is being considered.	TIME

Access to computer facilities may be necessary if the data identified by the agency are only available on magnetic tape or in machine readable format. No other special facilities or equipment should be needed.	EQUIPMENT FACILITIES
In addition to the State vocational education personnel, it would probably be advisable to involve the Executive Director of the State Occupational Information Coordinating Committee and those State agencies which have specific responsibilities for the provision of services to the special population under consideration (e.g., Vocational Rehabilitation, Corrections, Social Services, Employment Security, etc.).	PARTICIPANTS
The approach will be of greatest benefit when applied to those segments of the population considered by other State agencies as having special needs (e.g., handicapped, disadvantaged, correctional inmates, etc.).	APPLICATIONS
The approach may serve to establish new linkages with other State agencies which might prove beneficial in coordinating the delivery of services to the special population under consideration.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

OPERATIONALLY DEFINE THE SPECIAL NEEDS POPULATION(S)

The special population(s) will need to be operationally defined in order to determine the suitability of existing data sources. As a first step in operationally defining the population(s), existing definitions used by the State vocational education agency and the definitions used by other State agencies serving the special population(s) should be located and reviewed. Particular attention should be given to the distinction between definitions which pertain to the persons' inability to function in specific situations and those which pertain to their physical, psychological, or sociological characteristics. Functional definitions--such as those for disadvantaged and handicapped contained in the 1976 Vocational Education Amendments--describe the individuals' inability to function in a particular situation (e.g., a regular classroom, a specific job, etc.) which is a result of a physical, psychological or sociological condition. The other category of definitions describes characteristics of the population (e.g., economically disadvantaged, limited English-speaking, hard of hearing, single head of household, etc.) which might cause them to need special services. Most State and Federal agencies other than vocational education use the latter category of definitions.

Each definition of the special population(s) used by other State agencies for delivery of services or data collection purposes should be reviewed for its potential applicability to the special population(s) of concern to the vocational education agency. If another agency's definition is likely to under- or overestimate the prevalence of the special population being addressed by vocational education, it might still be possible to use the data by making adjustments for the expected under- or overestimation.

STEP 2

**IDENTIFY AVAILABLE SOURCES OF DATA ON THE
SPECIAL POPULATION(S)**

Other State agencies which have operational definitions of the special population of concern are potential sources of data which would be of use to vocational education. However, the existence of an appropriate definition does not imply that it is used for data collection purposes. Contacts will need to be made with the other agencies in order to determine the availability of the data under investigation.

Data already in tabular format probably will be easiest to obtain. Access to data contained on another agency's computer tapes will be more difficult to obtain, but such sharing of data is not unusual. The State Occupational Information Coordination Committees (SOICCs) were established to facilitate the sharing of information for program planning purposes, and a request for data belonging to another State agency might be responded to more favorably if it was channeled through the SOICC.

STEP 3

**ANALYZE AND REVIEW DATA TO DETERMINE THE
PREVALENCE, CHARACTERISTICS AND DISTRIBUTION
OF THE SPECIAL POPULATION**

Data available in tabular format oftentimes will be capable of immediate review without the need for further analyses. Data contained on computer tapes will require analysis in order to be of use in planning.

In designing the analyses to be performed on the data, it is advisable to actively involve an individual who is aware of the format of the data and the descriptors or variables associated with each observation. If that is not possible, a copy of the data collection form should be acquired and reviewed in conjunction with designing the analyses. Such forms will suggest possible classifications or tabulations of the data which would be of greatest utility to the agency.

Begin the analyses with simple tabulations or classifications. The initial tabulation should be examined to

determine whether or not the sample size(s) is adequate for further sub-classification of the population. It is important that inferences about the population under study not be made from insufficient sample size. Keep the analysis plan flexible throughout the data analysis process so that further exploration of the data can be performed based on the results of previous analyses.

STEP 4

REPORT FINDINGS

The results of the analyses should be reported in a format consistent with the information needs of decision-makers. Such a report will enable the findings to be reviewed by other agency staff, and will ensure that the information is not lost should there be a change in personnel assignments.

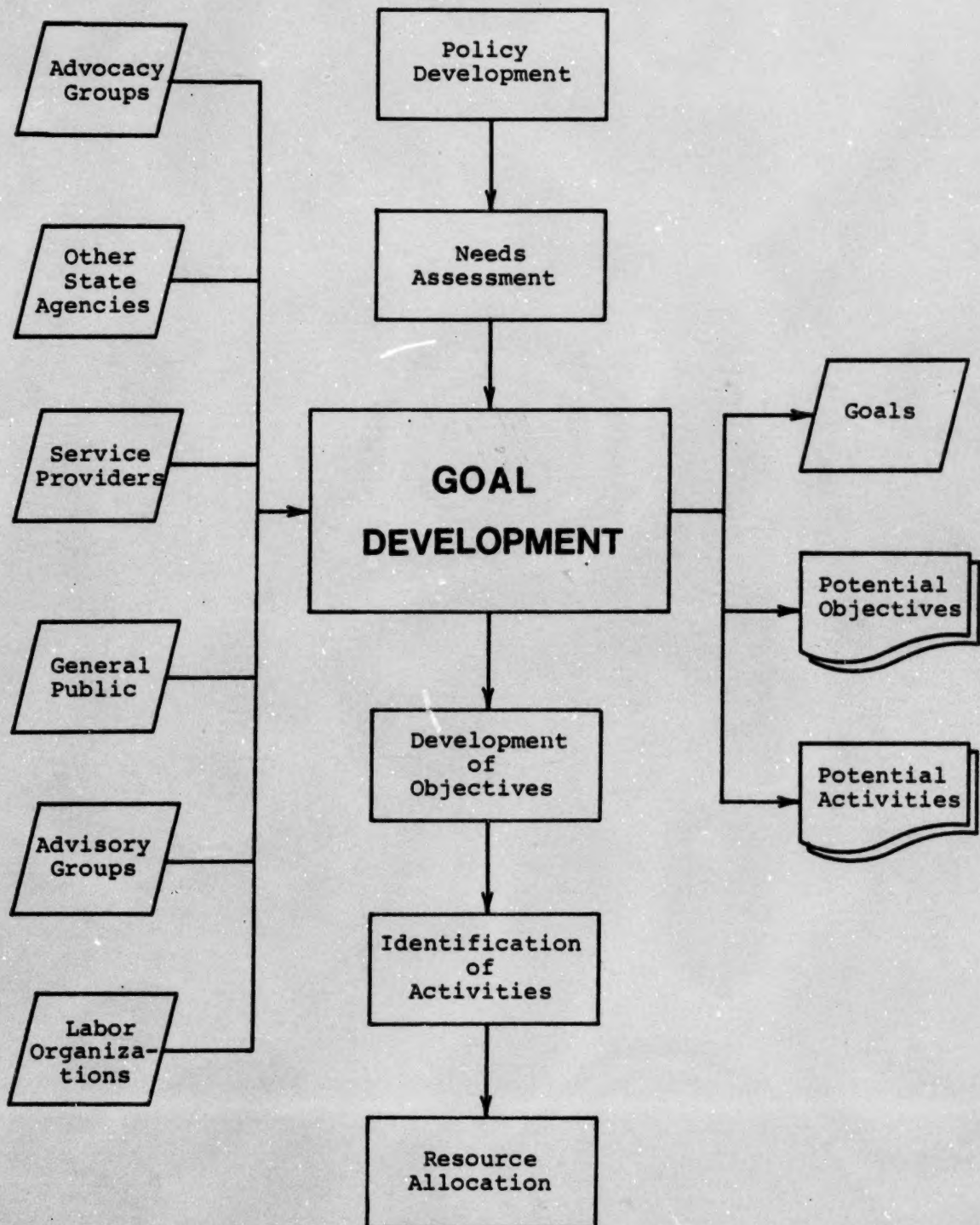
The report of the findings should include a description of the purpose of the investigation, the source of the data, major findings and an interpretation of their implications. Lengthy reports also should include an abstract or summary of the major findings.

200

FOR ADDITIONAL INFORMATION

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Assessment of the Prevalence and Service Need
Requirements of Handicapped and Disadvantaged
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CHAPTER FIVE



GOAL DEVELOPMENT

Chapter Five of the Planning System presents alternative procedures for developing statewide goals for special populations based on assessed needs. Goals serve to define the direction of planning activities with respect to the current status of vocational education services for special needs groups and as such represent a central component of the Vocational E.S.P. planning process. Four key activities characterize this component.

<u>Key Activity</u>	<u>Page</u>
1. Formulation of Goals	5
2. Review of Preliminary Goals	49
3. Prioritization of Goals	69
4. Dissemination of Goals	87

During the process of developing goals for special populations, there are a number of factors which affect the process and the resultant products. These characteristics (presented below) should be considered and dealt with during the implementation of any procedure outlined in this chapter.

Characteristics of the Process

1. National issues and priorities concerning special populations are reviewed during the goal development process.

2. In formulating statewide goals for special populations the State agency coordinates its efforts with other agencies involved in the delivery of services to special populations.*
3. In formulating statewide goals for special populations, the State agency solicits input from local educational agencies and institutions.*

Characteristics of the Products

1. Goals for special populations are consistent and compatible with each other and with the overall role and mission of vocational education within the State.
2. Goals for special populations appear to be appropriate and realistic in light of:
 - A. Documented needs of special populations
 - B. Historical trends in serving special populations
 - C. Available resources
 - D. Barriers restricting the access of target groups
3. Formulated goal statements designate the target group(s) to be served, what is to be accomplished and the purpose or intent of the goal.
4. Goal statements contain an estimated time frame for attainment or are classified as long-range or short-range goals.
5. Goals for special populations are stated in such a manner that they:
 - A. Are understandable by the general public
 - B. Provide direction to the planning and administration of vocational education and support services at both the State and local levels
 - C. Clearly express the intentions of the State vocational education agency

*Refer to supplements A and B at the end of this chapter for a sample listing of State agencies serving special populations and national professional and voluntary organizations serving special populations.

FORMULATION OF GOALS

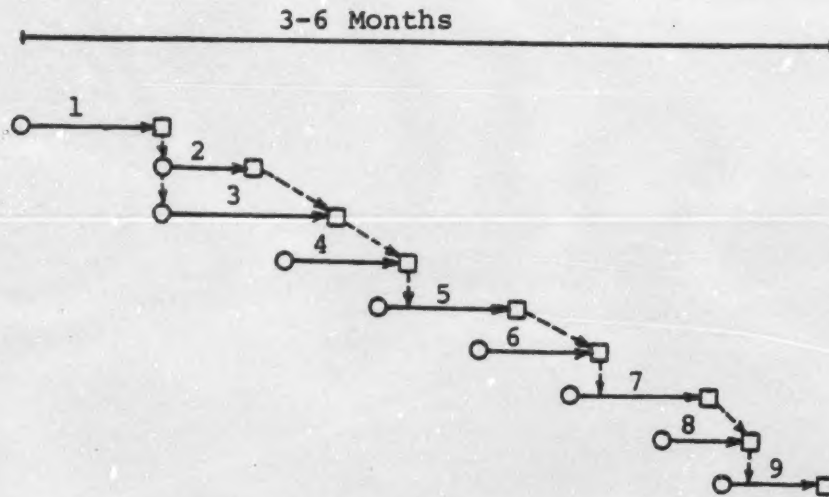
Three alternative approaches to formulating statewide goals for special populations are presented in this section. The first alternative, the Delphi Technique, is a non-interactive approach to formulating goals. Goals are based on the input received from a group of experts through an iterative process of soliciting responses and providing feedback until a consensus or majority opinion is reached. The second alternative provides a structured group approach to formulating goals. Individual responses are systematically obtained and aggregated into group judgments through mathematical ranking. The final procedure presented as an alternative to goal formulation is in-house brainstorming. This approach is marked by a loose procedural format and requires no input from persons outside the State agency.

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DELPHI TECHNIQUE

DELPHI TECHNIQUE (WITH THREE ITERATIONS)

LEGEND: ○ START POINT — ACTIVITY □ OUTCOME - - - - - CONSTRAINT



Steps:

1. Aggregate Goal Information
2. Select Respondents
3. Develop and Mail Out First Questionnaire
4. Analyze First Questionnaire
5. Develop and Mail Out Second Questionnaire
6. Analyze Second Questionnaire
7. Develop and Mail out Third Questionnaire
8. Analyze Third Questionnaire
9. Summarize Results

OVERVIEW

The Delphi Technique is a means of obtaining input on goals for special populations from a group of experts without assembling the experts in a group setting. It is an iterative process of soliciting goal responses and providing feedback to respondents until a consensus or majority opinion is established. Dependent on the amount of information and the extent of consensus desired, the Delphi can involve 2-5 rounds of questioning and analysis of responses. The first round consists of sending one or more general questions concerning goals for the special population being addressed by the Delphi to a sample of experts. The analysis and synthesis of the responses form the basis for goals to be included in the second questionnaire. In the second round respondents are requested to review each of the goals; agree, disagree or ask for clarification on each of the goals; provide comments regarding any of the goals; add any additional goals; and rank the goals in order of importance. Feedback from the responses to the second questionnaire are then provided in the third round of the Delphi. This process continues until the desired information and degree of consensus are obtained; generally, three rounds are sufficient.

KEY CONSIDERATIONS

The Delphi is a relatively inexpensive technique to implement. The major expense is SEA staff time which increases with the number of respondents and the amount of information desired. Additional costs include postage, long distance telephone calls and overhead expenditures.	COST
The Delphi requires the intermittent involvement of one staff member with expertise in survey methodology and research design. Additionally, two staff members knowledgeable of the State vocational education delivery system and the needs of the populations targeted by the Delphi should be available on a half-time basis to assist in the development of the questionnaires and the analysis of the responses. Limited clerical and secretarial involvement are also required.	STAFF TIME
The Delphi requires three to six months to complete dependent on the number of respondents, the number of rounds of questioning and the length of the questionnaires.	TIME

No unique facilities or equipment are required to implement the Delphi unless the size of the respondent pool necessitates computer analysis of responses.	EQUIPMENT FACILITIES
Selected respondents must possess suitable qualifications for answering the Delphi questions and exhibit an interest in participating in the process.	PARTICIPANTS
The Delphi can be used to formulate goals for any target population by simply changing the initial question(s) and the sample of respondents. It is particularly suitable when it is difficult to assemble individuals in a group setting and/or where there is diverse opinion as to the suitability of various goals for serving special populations. It is also useful in situations where personality conflicts or dominations inhibit the group process.	APPLICATIONS
Feedback provided by the Delphi serves to create an awareness and educate respondents as to the perceptions of colleagues and the concerns and intents of the State agency.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

AGGREGATE GOAL INFORMATION

In utilizing the Delphi technique for developing goals for special populations, descriptive information of the characteristics of the special population(s) being addressed during the process should be gathered for use as input. The types of information most appropriate for input into the goal setting process depend upon the special population(s) under consideration and whether the agency conducting the Delphi technique is concerned with the secondary or post-secondary level of vocational training. For instance, if the concern is with out-of-school individuals from a special population(s), the following types of information would be useful in goal development.

Out-of-School Population Data

- the number of persons interested in receiving vocational training
- the number of persons currently enrolled in vocational programs
- barriers to enrollment for those who are interested in vocational training, but not currently enrolled in a program.
- success rates of those who have been enrolled in a vocational program
- unemployment rates of the targeted special population(s)

Useful types of goal information regarding those individuals currently enrolled in school include the following:

In-School Population Data
• enrollment trends in secondary and/or post-secondary vocational programs • success rates of individuals enrolled in vocational programs • compensatory education needs • barriers to enrollment in vocational programs

It is recommended that these data be organized according to a format that allows for easy and accurate interpretation on the part of those participating in the goal setting process. This can be accomplished by translating the available information into:

- specification of goal topics, i.e., what will be targeted by the goal, and
- corresponding statements delineating the current status of vocational services to the special population(s) with respect to each topical area.

The following table illustrates a possible goal topic within the area of sex equity and examples of descriptive statements specifying the status of that topic. It by no means constitutes a comprehensive list of status statements with respect to the topical area.

The contents of current status statements depend entirely upon the information made available by the needs assessment. When preparing the information base to be used as input into the goal setting process, State agency staff should be concerned with providing respondents with all available data related to the goal topic in the form of descriptive statements similar to those presented in the following table. This information gives direction to the procedural steps which follow.

AN EXAMPLE OF A GOAL TOPIC AND CORRESPONDING
STATEMENTS DESCRIBING THE CURRENT STATUS OF THAT TOPIC

GOAL TOPIC	CURRENT STATUS
Enrollment of women in vocational programs	• Women constitute 15% of the total enrollment in T & I programs. • Women constitute 92% of the total enrollment in Occupational Home Economics programs. • Women constitute 7% of the total enrollment in Agriculture programs. • 35% of the out-of-school women surveyed indicated a desire to enroll in a vocational program. - 38% of these women cited lack of child care services as the reason for not enrolling; - 39% cited lack of awareness of vocational opportunities; - 23% cited various reasons such as the inability to secure a job in a non-traditional occupational area upon completion of training, negative attitudes of friends and family toward seeking non-traditional training, discouragement from guidance counselors, lack of adequate facilities (dressing rooms, restrooms), resistance from teachers and other students during a previously attempted enrollment.

STEP 2**SELECT RESPONDENTS**

Delbecq et al. (1975) suggest the following characteristics of respondents in a Delphi study.

Respondent Characteristics

- Respondents feel personally involved in the problem of developing goals for the special population under consideration.
- Respondents have pertinent information to share.
- Respondents are motivated to include the Delphi task in their schedule of competing tasks.
- Respondents feel that the aggregation of judgments of a respondent panel will include information which they, too, value and to which they would not otherwise have access.

Based on these characteristics, it is recommended that potential respondents include:

- representatives from other State agencies involved in the delivery of services to the special population;
- representatives from Local education agencies (including administrators, teachers, counselors, etc.);
- other service providers; and
- consumers or advocacy group representatives.

Respondents can be identified and selected through a nomination process. State agency staff can make decisions on those persons nominated based on the considerations described above. Once the respondents are selected they should be contacted by telephone to request participation in the study. If an insufficient number agree to participate, further nominations or sampling may be required.

STEP 3

DEVELOP AND MAIL OUT FIRST QUESTIONNAIRE

This step can be conducted concurrently with Step 2. The first questionnaire in a Delphi study generally includes a cover letter and one or more general questions which are designed to elicit goals for the special population under consideration that satisfactorily respond to identified needs. Background information on the problem may also be provided.

The cover letter should convey the following (Delbecq et al., 1975):

- a thank-you to the respondent for participating;
- an explanation of why his or her help is needed;
- a delineation of how the results of the Delphi will be utilized;
- instructions for responding; and
- a response date.

The initial Delphi question(s) follows directly from the goal information described in Step 1. For the example provided in Step 1, an appropriate Delphi question could be phrased:

What goals do you consider most appropriate for achieving sex equity in vocational education within the State? Please base your responses on the information provided you that depicts the current status of vocational education opportunities for women and men.

The information supplied to respondents would include all goal topics which relate to sex equity (for example, enrollment, placement, successful completion, agency staffing patterns, research, etc.) and corresponding statements which provide available information on the current status of the goal topics.

Another option is to develop and include one Delphi question for each goal topic:

1. What goals do you consider most appropriate for achieving sex equity in vocational education with respect to enrollment?
2. What goals do you consider most appropriate for achieving sex equity in vocational education with respect to placement?

(And so on for each goal topic.)

The advantage of this alternative is that it would ensure that respondents target in on each goal topic, rather than focusing on some and ignoring others. The information provided to respondents in this case would be the same as that provided in the first example. A form for responding, such as that portrayed in the following table, should be included with the question(s).

SAMPLE DELPHI RESPONSE FORM

GOAL TOPIC	CURRENT STATUS	SUGGESTED GOALS
enrollment of men and women in vocational programs	- women constitute 15% of the total enrollments in T & I programs - men constitute 8% of the total enrollment in occupational Home Economics programs . . .	
successful completion by men & women of vocational programs	29% of women enrolled in T & I successfully complete the program	

Prior to mailing the questionnaire to the respondents, it should be pilot tested on a small sample of individuals with similar characteristics to those who will participate in the actual Delphi. Any problems experienced by the test sample should be resolved and modifications of the cover letter and/or questions made. The questionnaire is then sent to the Delphi respondents. To assure continued interest on the part of the participants, the questionnaire packet should be mailed shortly after initial contact with the respondents. If the response rate is low, a follow-up letter or telephone call may be necessary.

STEP 4

ANALYZE FIRST QUESTIONNAIRE

The results of the first questionnaire form the basis for items included in the second questionnaire. Similar responses are collapsed and reworded to convey the intent of different respondents. This can be accomplished by placing each response on a 3x5 card and sorting the cards into stacks of similar responses for each question. The subsets of responses are examined to determine which are appropriate as goals and which are more suited to becoming objectives or activities for achieving the objectives. Where no actual goal exists for a subset of responses, one must be developed that encompasses the intent of the responses.

STEP 5

DEVELOP AND MAIL OUT SECOND QUESTIONNAIRE

The set of goals derived in Step 4 are transformed into easily understood statements which compose the items of the second questionnaire. The surplus information can be retained and used as input in the next two planning stages, the formulation of objectives and the identification of activities. Respondents are requested to:

- review each of the goal items;
- agree, disagree or ask for clarification on each of the goals;
- provide comments regarding any of the goals;

- add any additional goals; and
- rank the goals in order of importance.

STEP 6

ANALYZE SECOND QUESTIONNAIRE

Analysis of the second questionnaire involves four substeps.

Questionnaire Analysis

1. Tally the responses to each goal item and calculate the percentage of respondents who agreed and disagreed with the goal.
2. Calculate the median priority ranking and range of rankings for each goal.
3. Summarize the comments provided for each goal.
4. Clarify or eliminate goals which were unclear to a large number of respondents.

At this point the State agency should evaluate the results to determine whether they are consistent with the identified needs of the special population under consideration. If the Delphi is not producing the needed information, modifications should be made prior to the development of the third questionnaire, e.g., stating the items in more general or specific terms.

STEP 7**DEVELOP AND MAIL OUT THIRD QUESTIONNAIRE**

The third questionnaire consists of the goal statements, the results of the second questionnaire (median and range of rankings and percent agreement), and a summary of comments for each goal. Again, the respondents are requested to indicate whether they agree or disagree with a goal and to assign a ranking as to the importance of the goal. The comments provide participants with a frame of reference regarding the summary of responses and may serve to clarify the intent of the goal.

STEP 8**ANALYZE THIRD QUESTIONNAIRE**

The third questionnaire is analyzed in the same manner as the second. Any additional comments or reactions provided by the respondents are incorporated with those obtained in the second questionnaire. These final results are the basis for identifying goals for serving special populations. The extent of agreement with the items indicates the perceived necessity for attaining the goal in enhancing the delivery of vocational education to special populations. The rankings indicate the relative importance of the goals and thus provide a means for selecting from among the alternatives identified in the earlier questionnaires. Comments provided throughout the Delphi process provide more substance to the identified goals and may also illuminate some of the difficulties and benefits associated with selecting one alternative goal over another.

STEP 9**SUMMARIZE RESULTS**

The results of the Delphi process should be summarized in a report which can serve as a vehicle for providing feedback to participants and a basis for decision making in developing goals for delivering vocational education to special populations. The report should also include a description of the methodology, a discussion, and conclusions and recommendations.

SAMPLE MODIFICATIONS

The previous discussion has focused on a Delphi approach which utilized three rounds of questionnaires. Dependent on the information needs of planners, more or fewer rounds could be employed. For example, if the purpose for conducting the Delphi is to update or expand upon certain goals, the Delphi process could be initiated with the second questionnaire. On the other hand, if further consensus and clarification are desired, the Delphi team may wish to include a fourth or even fifth round of questionnaires. Respondent effort and analyses times could be minimized by including only those goals which needed further clarification or were still subjects of considerable disagreement. Or an alternative is to send later editions of the questionnaire only to those respondents whose opinions differed from the majority.

Another modification of the basic Delphi technique is to apply it in a group setting. Using this approach participants generate goals in a series of small groups. They are then mailed the results of the small group sessions and requested to rank or agree/disagree with the resultant goals. The groups may then be reassembled for further clarification and expansion of the prioritized goals.

These are only example modifications of the Delphi. The technique essentially represents a means for obtaining a majority or consensus of expert or representative input to decision making through providing feedback of results. As such, the Delphi can be modified in a number of ways which suit the information needs of special needs planners.

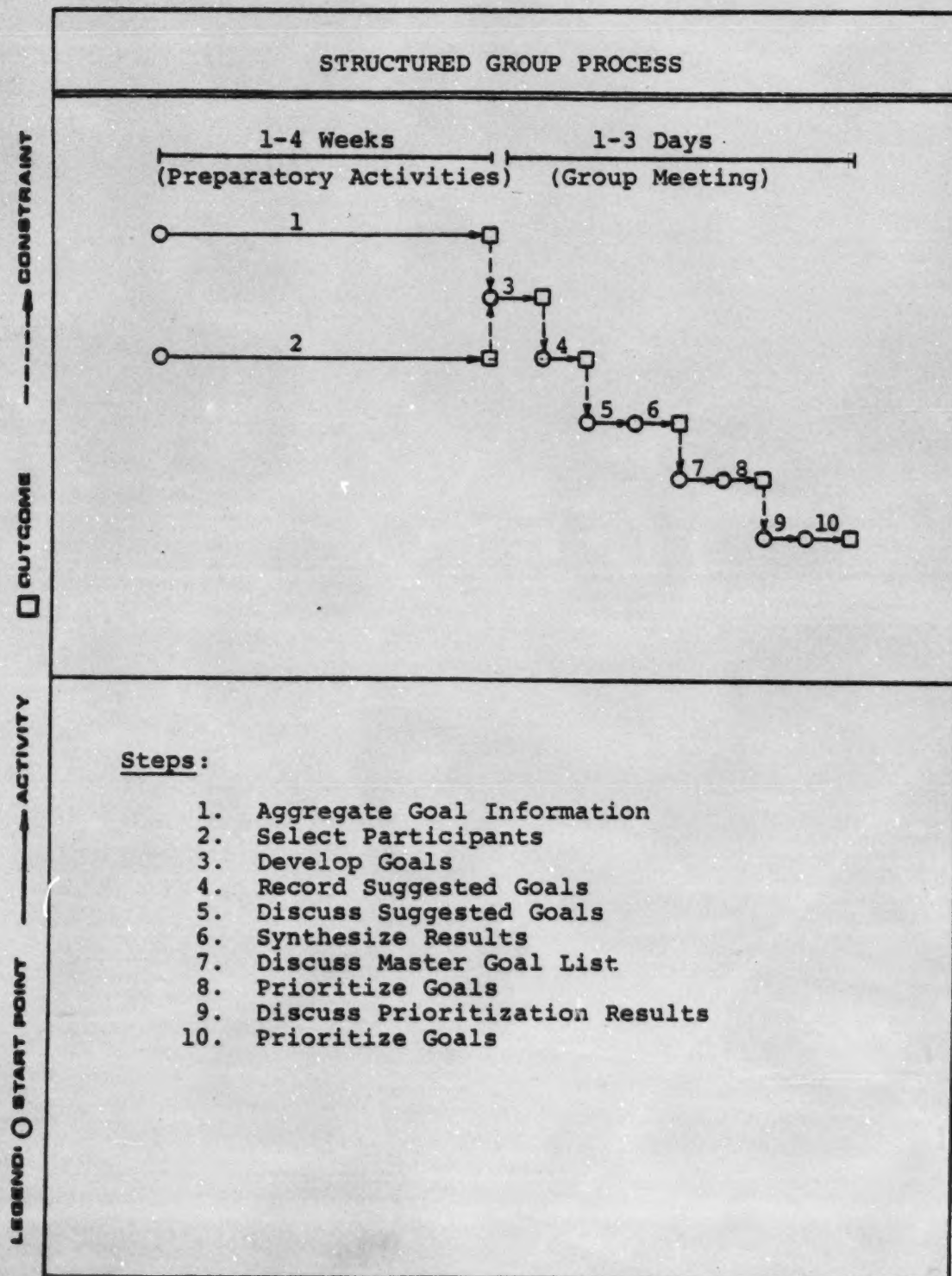
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STRUCTURED GROUP PROCESS



OVERVIEW

The structured group process, as described here, can facilitate the generation of a large number of goals for a particular special population and produce a prioritized listing of a subset of these. It is a systematic means of soliciting individual responses and aggregating group judgments through quantitative ranking rather than through discussion or debate.

Participants are provided with goal topics and statements designating the current status of vocational services available to the special population(s) being addressed by the structured group process with respect to each topic. Based on this information, suggested goals are generated independently by each group member. They are solicited and recorded on a flip chart by the group leader, one from each member at a time, until the lists of suggested goals from all members have been disclosed in their entirety. Following this is a brief discussion of each suggested goal on the group list for clarification purposes. The group leader(s) synthesizes the results of the goal generation process by aggregating the suggested goals into subsets of related statements. These statements are examined to determine which are appropriate as goals and which are more suited to being objectives or activities for achieving an objective. If any subset of related statements does not contain one that can be specified as a goal, it is the task of the group leader(s) to develop a suitable goal for the subset. A master list of the resultant goal statements is produced and presented to the participants.

If more than one group is participating in the goal formulation process, they convene for implementation of the final steps. The master list is reviewed by the group for clarity and to determine if distortion of the intended meaning of the goals occurred during the synthesis process. Group members vote on the importance of goals by selecting the top 5 to 9. To obtain additional information, these can be rank-ordered in terms of priority for attainment.

If increased accuracy in the prioritization judgments of group members is desired, two optional steps can be added to the process. A discussion of the preliminary prioritization results can occur followed by a final voting on priorities.

KEY CONSIDERATIONS

The structured group process typically involves minimal expense for implementation. Factors contributing to the expense are 1) staff time, 2) meeting room charges (if any), 3) supplies (minimal), and 4) location of the participants. The number of staff required depends directly upon the number of groups involved in the process. Typically, one staff member per group is sufficient to serve as both leader and recorder. If the participants are located out of town, other expenses may include long distance phone calls and travel reimbursements.	COST
The structured group process requires that at least one staff member be trained in leading a group(s) through the goal setting process. If there is more than one group, the option exists to have one overall group leader and individual group recorders or leaders for each small group. Leadership skills include understanding the process, having a strong background in vocational education and the special population under consideration and possessing the ability to maintain control over a group of people. This procedure requires a minimum of five days in actual preparation and one day for implementation.	STAFF
Time considerations in implementing the structured group process include 1) physical preparation time (arranging a meeting room and gathering supplies), 2) selecting and contacting the appropriate persons to serve as participants, 3) organizing the assessment information, and 4) conducting the group meeting. Dependent on the difficulty in identifying participants and scheduling the meeting, the preparatory tasks (1, 2 & 3) require one to four weeks (calendar time) to complete. The minimal time for completing the group process is one day.	TIME

A large enough meeting room to accommodate the number of participating groups is required for implementing the structured group process. Suggested supplies include a flip chart and felt pen for each group, approximately seven 3x5 cards for each participant, pencils and paper.	EQUIPMENT FACILITIES
In order to effectively complete the structured group process, it is essential that participants share a common frame of reference so that they can communicate ideas. Participants must also share an interest in goal development for the special population and be willing to attend a highly structured group meeting.	PARTICIPANTS
The structured group process can be used to formulate goals for any target population by adjusting the information input and selected participants to fit the population. The technique is useful for pooling individual judgments when a diversity of opinion exists. It is particularly suitable for determining solutions to a singular problem area, such as the development of goals for a particular special population. Also, the structured group process requires that participants conform to a highly structured format, a situation in which some individuals may not be comfortable or at their optimum level of effectiveness.	APPLICATIONS
The structured group process guarantees balanced participation among members and restricts domination by those individuals who are more expressive or in higher level positions. It also serves to create an awareness among the participants of state and national concerns regarding the special population and of the perceptions of their professional associates. Participation in the structured group process tends to promote interest in future phases of planning for the special population. The structured group process results in the generation of valuable information for the formulation of objectives and the identification of activities.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

AGGREGATE GOAL INFORMATION

In utilizing this structured group process for developing goals for special populations, descriptive information on the characteristics of the special population(s) being addressed during the process should be gathered for use as input. The types of information most appropriate for input into the goal setting process depend upon the special population(s) under consideration and whether the agency conducting the structured group process is concerned with the secondary or post-secondary level of vocational training. For instance, if the concern is with out-of-school individuals from a special population(s), the following types of information would be useful in goal development.

Out-of-School Population Data

- the number of persons interested in receiving vocational training
- the number of persons currently enrolled in vocational programs
- barriers to enrollment for those who are interested in vocational training, but not currently enrolled in a program
- success rates of those who have been enrolled in a vocational program
- unemployment rates of the targeted special population(s)

Useful types of goal information regarding those individuals currently enrolled in school include the following.

In-School Population Data

- enrollment trends in secondary and/or post-secondary vocational programs
- success rates of individuals enrolled in vocational programs
- compensatory education needs
- barriers to enrollment in vocational programs

It is recommended that these data be organized according to a format that allows for easy and accurate interpretation on the part of those participating in the goal setting process. This can be accomplished by translating the available information into:

- specifications of goal topics, i.e., what will be targeted by the goal, and
- corresponding statements delineating the current status of vocational services to the special population(s) with respect to each topical area.

The following table illustrates a possible goal topic within the area of sex equity and examples of descriptive statements specifying the status of that topic. It by no means constitutes a comprehensive list of status statements with respect to the topical area.

The contents of current status statements depend entirely upon the information made available by the needs assessment. When preparing the information base to be used as input into the goal setting process, State agency staff should be concerned with providing respondents with all available data related to the goal topic in the form of descriptive statements similar to those presented in the following table. This information gives direction to the procedural steps which follow.

AN EXAMPLE OF A GOAL TOPIC AND CORRESPONDING
STATEMENTS DESCRIBING THE CURRENT STATUS OF THAT TOPIC

GOAL TOPIC	CURRENT STATUS
Enrollment of women in vocational programs	● Women constitute 15% of the total enrollment in T & I programs ● Women constitute 92% of the total enrollment in Occupational Home Economics programs. ● Women constitute 7% of the total enrollment in Agriculture programs. ● 35% of the out-of-school women surveyed indicated a desire to enroll in a vocational program. - 38% of these women cited lack of child care services as the reason for not enrolling; - 39% cited a lack of awareness of vocational opportunities; - 23% cited various reasons such as the inability to secure a job in a non-traditional occupational area upon completion of training, negative attitudes of friends and family toward seeking non-traditional training, discouragement from guidance counselors, lack of adequate facilities (dressing rooms, restrooms), resistance from teachers and other students during a previously attempted enrollment.

STEP 2**SELECT PARTICIPANTS**

To be most effective in producing goals for a particular special population, a primary consideration is who is to be involved in the process. The first criterion upon which to base participant selection is knowledge and experience with regard to the special population under consideration. Potential participants include

- representatives from other State agencies involved in the delivery of services to the special population;
- representatives from Local education agencies;
- other service providers; and
- consumers or advocacy group representatives.

To be considered for inclusion in the goal setting process, it is recommended that potential participants express a strong interest in developing goals for the special population. An additional concern is that they share a similar enough frame of reference to enable effective communication among the group. This is not to imply that it is essential for the group to be homogeneous. However, some commonality in experiential background is desirable so as to avoid communication difficulties.

One way to select participants is through a nomination process. State agency staff can make decisions on those persons nominated based on the considerations described above. Once the appropriate persons have been identified, the next steps are to enlist their cooperation and coordinate their time schedules for the meeting.

STEP 3**DEVELOP GOALS**

At the onset of the group meeting, participants are given an explanation as to the purpose and importance of the meeting, and the procedural steps to be followed for developing goals are outlined. Participants are divided

into groups of from 5 to 9 members and provided with the goal information described in Step 2. They are then asked to work silently and individually in generating goals that correspond to each goal topic. The time allotted for this step depends on the number of goal topics and is regulated by the group leader so as to maintain control over the length of the meeting.

STEP 4

RECORD SUGGESTED GOALS

The group leader elicits one goal from each group member at a time until all members have disclosed their entire lists. This ensures equal participation in the presentation of goals. The goals are recorded on a flip chart by the group leader so that they are visible to all. If duplicates occur, they are deleted. No discussion or debate on the goals is allowed during this step.

STEP 5

DISCUSS SUGGESTED GOALS

After the goals are recorded on the flip chart, each one is discussed in turn. This discussion is mainly for purposes of clarification of meaning or rationale, rather than a debate as to the importance of particular goals. Therefore, it is necessary for the group leader to maintain control over the discussion to ensure that no goal is neglected while others receive greater focus. For each suggested goal, group members are asked to provide their impressions of what the goal means and the logic behind its inclusion on the list. Differences of opinion can be stated, but the group leader must see to it that they are merely recorded and not debated.

STEP 6

SYNTHESIZE RESULTS

At this point in the process, the participants adjourn while the group leader(s) analyzes and organizes the results.

The task involves combining all related statements into subsets then determining which of those statements are appropriate as goals and which are more suited to becoming objectives or activities for accomplishing the objectives. Where no actual goal exists for a subset of statements, the group leader(s) develops one, taking care not to distort the intended meaning of the suggested goals. The statements identified as goals are recorded on a master list. The surplus information produced during the generation of goals can be retained and used as input in the next two planning stages, the formulation of objectives and the identification of activities.

STEP 7

DISCUSS MASTER GOAL LIST

The participants reconvene and discuss the results of the synthesization process. (If more than one group is involved, they converge for the final steps of the structured group process.) The goals are reviewed for clarify and to ensure that the original intent of the suggested goals had not been misinterpreted or distorted during the synthesization process. Goals are not eliminated during this step. The purpose of the discussion is to foster a common understanding among participants on the meaning of each goal.

STEP 8

PRIORITIZE GOALS

In determining the priority of the goals, participants independently select 5 to 7 of what they consider to be the most important goals. Next, they rank the selected goals in ascending order of importance.

The ranking can be done through the use of 3x5 cards. Group members select the 5 (or 7) most important goals and write each in the middle of a 3x5 card. The goals are then ranked, with 1 indicating the least important and 5 indicating the most important. The cards are then collected and the votes are tallied on the flip chart for review. An aggregate group priority ranking is calculated by multiplying the number of times the goal was ranked by the sum of the ranks and then ranking the products. An example of this is provided in the following table.

GROUP RANKINGS AND PRIORITIZED GOALS					
Goal Number	Ranks	Number of Times Ranked	Sum of Ranks	Product of Number of Ranks X Sum	Group Priority
1	4,5,2,5,5	5	21	105	2
2	1,2,1,1	4	5	20	5
3	3,3,2,3	4	11	44	3
4	2,1,4,2	4	9	36	4
5	5,4,5,4,5	5	23	115	1
6	2,1,3	3	6	18	6

STEP 9

DISCUSS PRIORITIZATION RESULTS

Goal rankings are discussed for clarification purposes only, not debate. A brief discussion at this point can establish a common set of criteria on which ranking judgments will be based. In addition, a discussion will serve to clear up any problems due to misunderstanding or misinformation.

STEP 10

PRIORITIZE GOALS

The same procedures as those presented in Step 8 are followed.

SAMPLE MODIFICATIONS

The structured group process may be concluded at Step 8. However, steps 9 and 10 can increase the accuracy of the participants' judgments, and for that reason, it is desirable to include them. During the discussion of the preliminary prioritization, differences due to unequal information, misinformation or a misunderstanding of a goal's meaning can be clarified. The additional clarification provided in Step 9 can result in a more accurate final prioritization of goals in Step 10.

An alternative means of determining priority goals is to employ a rating rather than ranking procedure. This facilitates the prioritization process when there is a large number of goals from which to select. Using a rating technique participants rate their perception of each goal's importance (e.g., on a scale from 1 to 5, with 5 representing a high priority goal). Participants' ratings can then be averaged, and those goals with the highest mean (or median) importance ratings are selected.

It is also possible to conclude the formulation procedure before the goals are prioritized. Prioritization is necessary at a later stage in goal development but not during the formulation process.

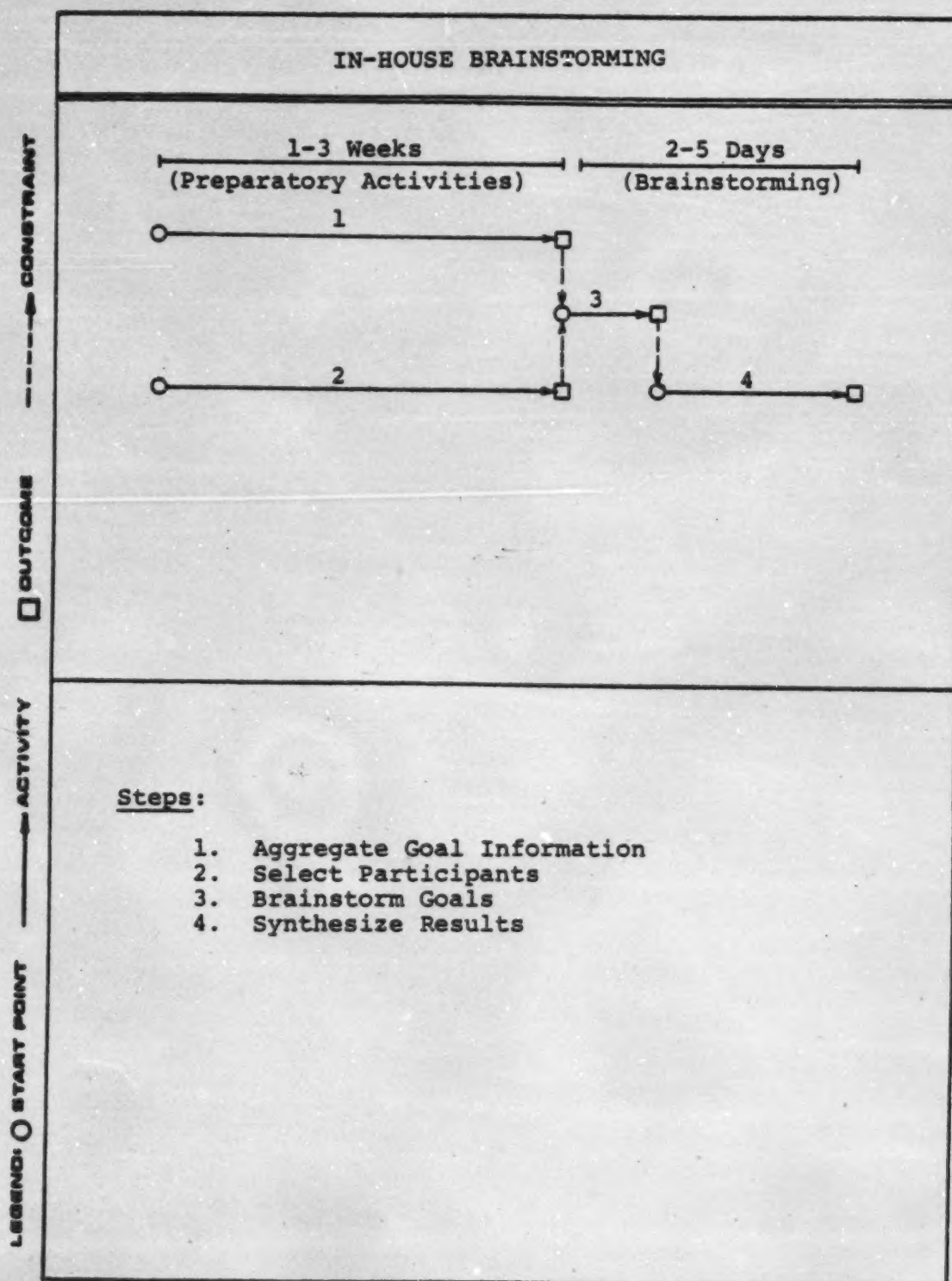
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IN-HOUSE BRAINSTORMING



OVERVIEW

In-house brainstorming for the purpose of formulating goals for special populations involves creative collaboration among a group of State vocational education agency staff. The technique is marked by a relatively low degree of structure but a high degree of idea production. There is a very loose procedural format to adhere to within the brainstorming session itself. The participants advance through one goal topic at a time and proceed to a new topic only after all goal ideas for the current one have been exhausted. A written record is kept of every idea that is generated. To achieve an effective and productive session, there are several rules that must be followed:

- No criticism or judgment of ideas is permitted during the session.
- "Free association" is encouraged.
- Quantity is desired.
- Combination of and improvement on suggested goals are encouraged.
- Breaking into small groups for discussion is prohibited.

The goals generated during the in-house brainstorming session provide the basis for the review and feedback process which is the next step in the development of goals. During that time input as to the feasibility and importance of the brainstormed goals can be obtained from other State agencies involved in the delivery of services to special populations. Local education agencies, other service providers and consumers or advocacy groups.

KEY CONSIDERATIONS

In-house brainstorming involves minimal expense for implementation. The major consideration is staff time which increases with the number of individuals chosen to participate.	COST
In-house brainstorming requires one group leader, one recorder and as many agency staff as are chosen to participate. Leadership skills include the ability to create an atmosphere conducive to a high level of creativity and to maintain control over a group of individuals. The procedure requires a minimum of two days preparation time and a half day for implementation.	STAFF
Time considerations include preparation time (organizing the needs assessment data into a suitable format for input and selecting participants) and conducting the brainstorming session. Dependent on the difficulty in organizing the assessment information and in scheduling the meeting, the preparatory tasks require from 5 to 15 days to complete. The length of the session depends on the information needs of the planners. Minimum calendar time for completing a session is half of a day.	TIME

A room large enough to accommodate the number of participants is required.	EQUIPMENT FACILITIES
Participants should be experienced with respect to the special population under consideration and share an interest in the planning process. Additional characteristics that are desirable in the participants are creativity and the disposition for freely expressing ideas in a group.	PARTICIPANTS
In-house brainstorming can be used to formulate goals for any target population by changing the information input and the selected participants. It is particularly suitable in situations where time constraints restrict the use of a lengthy procedure.	APPLICATIONS
Because participants are limited to State agency staff, the goals reflect that limitation in that they are not representative of other points of view. Brainstorming may result in the generation of valuable information to be used in the formulation of objectives and the identification of activities for achieving the objectives.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

AGGREGATE GOAL INFORMATION

Participants in the in-house brainstorming session should be supplied with descriptive information of the characteristics of the special population(s) being addressed during the session. The types of information most appropriate for input into the goal setting process depend upon the special population(s) under consideration and whether the agency conducting the brainstorm session is concerned with the secondary or post-secondary level of vocational training. For instance, if the concern is with out-of-school individuals from a special population(s), the following types of information would be useful in goal development.

Out-of-School Population Data

- the number of persons interested in receiving vocational training
- the number of persons currently enrolled in vocational programs
- barriers to enrollment for those who are interested in vocational training, but not currently enrolled in a program
- success rates of those who have been enrolled in a vocational program
- unemployment rates of the targeted special population(s)

Useful types of goal information regarding those individuals currently enrolled in school include the following:

In-School Population Data
• enrollment trends in secondary and/or post-secondary vocational programs • success rates of individuals enrolled in vocational programs • compensatory education needs • barriers to enrollment in vocational programs

It is recommended that these data be organized according to a format that allows for easy and accurate interpretation on the part of those participating in the goal setting process. This can be accomplished by translating the available information into:

- specifications of goal topics, i.e., content area targeted by the goal, and
- corresponding statements delineating the current status of vocational services to the special population(s) with respect to each topical area.

The following table illustrates a possible goal topic within the area of sex equity and examples of descriptive statements specifying the status of that topic. It by no means constitutes a comprehensive list of status statements with respect to the topical area.

The contents of current status statements depend entirely upon the information made available by the needs assessment. When preparing the information base to be used as input into the goal setting process, State agency staff should be concerned with providing respondents with all available data related to the goal topic in the form of descriptive statements similar to those presented in the following table. This information gives direction to the procedural steps which follow.

AN EXAMPLE OF A GOAL TOPIC AND CORRESPONDING
STATEMENTS DESCRIBING THE CURRENT STATUS OF THAT TOPIC

Goal Topic	Current Status
Enrollment of women in vocational programs	● Women constitute 15% of the total in T & I programs. ● Women constitute 92% of the total enrollment in Occupational Home Economics programs ● Women constitute 7% of the total enrollment in Agriculture programs. ● 35% of the out-of-school women surveyed indicated a desire to enroll in a vocational program. - 38% of these women cited lack of child care services as the reason for not enrolling; - 39% cited lack of awareness of vocational opportunities; - 23% cited various reasons such as the inability to secure a job in a non-traditional occupational area upon completion of training, negative attitudes of friends and family toward seeking non-traditional training, discouragement from guidance counselors, lack of adequate facilities (dressing rooms, restrooms) resistance from teachers and other students during a previously attempted enrollment.

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STEP 2**SELECT PARTICIPANTS**

Participants in the brainstorming session will be selected from among staff of the State vocational education agency. Adequate time should be allowed to coordinate participants' schedules. Whenever possible, characteristics of participants should include knowledge and experience with respect to the special population for which goals are being developed. Some of the most obvious candidates would be:

- State coordinators for the special populations,
- State consultants for the special populations,
- teacher educators in vocational special needs, and
- other staff with responsibilities for the provision of services to individuals with special needs.

Other potential participants might include:

- planning staff,
- bureau heads or section chiefs,
- program area consultants, and
- research personnel.

Additional characteristics that are desirable in participants in the brainstorming session are creativity and open-mindedness. A successful session in large part depends on how easily participants can get into the spirit of the 'game' and freely express any idea that enters their thoughts, no matter how trivial or insignificant they may feel it is.

STEP 3**BRAINSTORM GOALS**

Before the brainstorming session begins, the person in charge provides participants with the goal information described in Step 1 and defines the rules of the technique.

Brainstorming Rules

- No criticism or judgment of ideas is permitted during the session. Criticism tends to inhibit the sharing of ideas and would, therefore, jeopardize the effectiveness of the technique.
- "Free association" is encouraged. Social facilitation sparks creativity and expedites the production of a large number of ideas.
- Quantity is desired. The greater the number of goals produced the more likelihood of achieving adequate coverage in responding to assessed needs.
- Combination of and improvement on suggested goals is encouraged. Expanding upon previously suggested goals often results in the generation of more and better goals.
- Breaking into informal subgroups for discussion is prohibited. Like criticism, breaking into small groups is a hazard to the productivity of the brainstorming session. It reduces the chance for social facilitation on which much of the success of the technique depends.

The session leader guides participants through the brainstorming process, one goal/topic at a time, until all ideas on each topic are exhausted. Attempting to brainstorm goals for more than one topic simultaneously can reduce the effectiveness of the technique. Tackling too complex a subject in a brainstorming session causes a tendency to switch back and forth among topics. This can result in the incomplete coverage of some or all of the goal topics. Presenting the topics one at a time prevents such a situation from occurring.

A final consideration of the brainstorming session is that a written record be kept of all suggested goals. While it need not be a verbatim recording, the list should be an all-inclusive representation of each goal that was suggested.

STEP 4

SYNTHESIZE RESULTS

The results of the brainstorming session will provide the basis for review and feedback from Local education agencies and service providers, other State agencies involved in the delivery of services to the special population under consideration and consumers or advocacy groups. Input from representatives of these agencies and groups should be solicited during the goal development process. However, the results of the brainstorming session need to be examined and summarized before they are submitted for review. Similar goals can be collapsed into subsets. It is then determined which suggestions in each subject represent goals and which are more appropriate as objectives or activities for achieving the objectives. It may be necessary to reword or restate ideas so that they contain the quality characteristics of a goal statement as outlined in the introduction of this chapter. Other information can be retained and used as input into the formulation of objectives or the identification of activities.

SAMPLE MODIFICATIONS

Numerous modifications can be made on the brainstorming process. The technique represents a means for group collaboration on problem-solving and can essentially be adapted to fit most situations. Participants may vary to include representatives from other State agencies, Local education agencies, other service providers, or consumer/advocacy groups. The setting may vary: brainstorming can be conducted using a number of small groups within a workshop setting. Each group might brainstorm ideas for different goal topics, or all groups may focus on the same topics with the results being combined at the end of the session. The brainstorming session may be extended to include a prioritization process, once the initial information has been organized according to a suitable format for statewide goals. Modifications would necessarily depend on the information needs of the decision maker.

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REVIEW OF PRELIMINARY GOALS

The second key activity within goal development for special populations is a review of the preliminary goals by groups external to the State vocational education agency. The input into the review process are the products of a goal formulation procedure that has been implemented prior to this stage of goal development. Input typically consists of a list of suggested goals and a brief explanation or rationale for each goal.

This section provides descriptions of two alternative procedures for reviewing goals--an interactive approach and a non-interactive approach. The interactive approach to reviewing goals is conducted in a group setting but facilitates balanced participation through systematic solicitation of responses and structured discussion. The non-interactive approach obtains input and provides feedback through the use of mailed review forms. Thus it provides a means of obtaining input from a variety of sources without assembling the participants.

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INTERACTIVE REVIEW PROCESS

INTERACTIVE REVIEW PROCESS

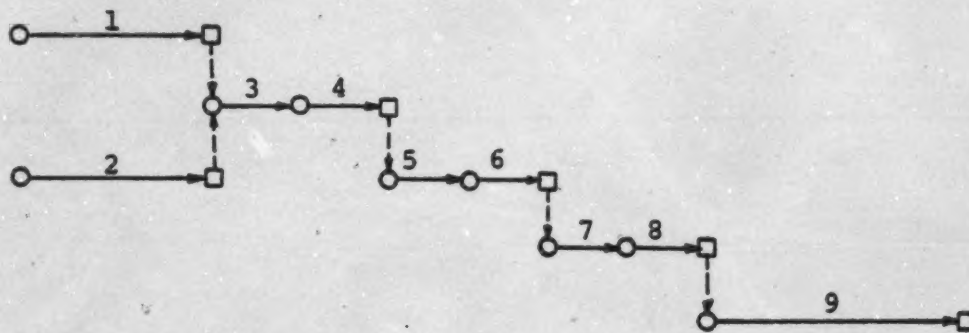
CONSTRAINT

OUTCOME

ACTIVITY

LEGEND: ○ START POINT

1-3 Weeks (Preparation) 4-2 Days (Group Meeting) 1-3 Days (Summarization)



Steps:

1. Prepare Information Input
2. Select Respondents
3. Review of Suggested Goals
4. Record Feedback
5. Lead Discussion of Feedback
6. Synthesize Feedback
7. Lead Large Group Discussion of Feedback
8. Synthesize Feedback
9. Summarize Results

OVERVIEW

The interactive review process is a means of obtaining a large amount of feedback on suggested goals for special populations. Although it requires face-to-face-contact, the interactive approach (as described here) facilitates balanced participation among participants and attempts to restrict domination by a few individuals.

Participants are provided with a list of suggested goals and available information related to each, such as rationales or background information. Participants independently review the list of suggested goals and provide comments on each and suggestions for additions or deletions. The comments and suggestions are solicited and recorded, one from each member at a time, until all have been disclosed. A brief discussion of the feedback occurs for clarification purposes. Additional comments are recorded. If more than one group is participating, the group leader synthesizes the feedback from the small groups and presents a summary to the entire group of participants for further discussion. Feedback from the large group discussion is incorporated with the previously obtained suggestions and comments. These are summarized in a report which will serve as a basis for decision makers in revising the list of suggested goals. In situations where only one group is participating in the review process, the first discussion of feedback is followed by a synthesization and summarization of results.

KEY CONSIDERATIONS

The interactive approach to reviewing goals for special populations typically involves minimal expense for implementation. Factors contributing to the expense are 1) staff item, 2) meeting room charges (if any), 3) minimal supplies and 4) location of the participants. The number of staff required depend directly on the number of groups involved. If the participants are located out of town, other expenses may include long distance phone calls and travel reimbursements.	COST
The interactive approach requires one staff member per group to serve as both leader and recorder. Leadership skills include understanding the process and processing the ability to maintain control over a group of people. Fulltime staff are required for a minimum of two days' preparatory time and one day for implementation.	STAFF
The interactive approach requires two to four weeks (calendar time) to implement depending upon the difficulty in identifying participants and scheduling a meeting time.	TIME

A large enough meeting room to accommodate the number of participating groups is required. Suggested supplies include a flip chart and felt pen for each group, pencils and paper.	EQUIPMENT FACILITIES
Participants must share an interest in goal development for the target special population and be willing to attend a highly structured group meeting.	PARTICIPANTS
The interactive review process can be used to provide feedback on goals for any target population by changing the list of suggested goals and the sample of participants. The technique is useful for pooling individual judgments when a diversity of opinion exists. It is particularly suitable for dealing with a singular task, such as reviewing goals for a special population.	APPLICATIONS
The interactive approach guarantees balanced participation among members and restricts domination by those individuals that are more expressive or in higher level positions. It also serves to create an awareness among the participants of the perceptions of the members of various affiliated groups.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

PREPARE INFORMATION INPUT

Participants in the interactive approach to reviewing goals for special populations should be presented with a list of suggested goals and, when available, a brief explanation or rationale for each. The list of goals and related rationale need only be organized into a suitable format for the review process.

STEP 2

SELECT REpondENTS

The following groups should be considered when obtaining feedback on preliminary goals:

- Other State agencies serving special populations
- Local education agencies and other service providers
- Consumer/advocacy groups
- State and local advisory councils
- General public
- Labor organizations

The groups to be represented in the review and feedback process depend upon the point at which the SVEA wishes to obtain input from external agencies or groups. If, for instance, input had been obtained from other State agencies, local education agencies and advocacy groups during the formulation of the preliminary set of goals, those groups may not be required for the review process.

How respondents are selected depends on the size of the group and/or desired participant characteristics. If SVEAs wish feedback from persons knowledgeable of the needs of the target population, they may use a nomination procedure to select respondents. When group size is large, it may be more desirable to select a representative sample of that group to serve as respondents.

STEP 3

REVIEW OF SUGGESTED GOALS

At the onset of the review session, participants are given an explanation as to the purpose and importance of the session, and the procedural steps to be followed for reviewing the goals are outlined. Participants are divided into groups of from 5 to 9 members and provided with the list of suggested goals. They are asked to review the goals silently and individually and provide feedback in the form of comments and suggestions for additions or deletions.

STEP 4

RECORD FEEDBACK

An appointed or elected group leader elicits suggestions or comments on one goal at a time from each group member until all feedback has been disclosed. Each comment is recorded on a flip chart which is available for each group's use. This ensures equal participation of all group in the provision of feedback. No discussion or debate occurs during this step.

STEP 5**LEAD DISCUSSION OF FEEDBACK**

After all suggestions and comments are recorded on the flip chart, each one is discussed in turn. This discussion is mainly for purposes of clarification of meaning or rationale, rather than a debate of agreement or disagreement with the feedback. It is the task of the group leader to maintain control over the discussion so that all suggestions and comments are considered by the group. Differences of opinion and additional comments are recorded.

STEP 6**SYNTHESIZE FEEDBACK**

If there is more than one group participating in the review session, participants adjourn while the group leaders aggregate and organize the feedback from the small groups. If only one group is involved, steps 6 and 7 are omitted; step 8 would follow the discussion of the feedback.

Synthesis of the feedback involves summarizing the comments and suggestions for input into a general discussion. Similar suggestions or comments are collapsed and reworded to convey the intent of different participants. If duplications occur, only one is retained.

STEP 7**LEAD LARGE GROUP DISCUSSION OF FEEDBACK**

When more than one group is involved in the review process, they converge for a final discussion of the summarized feedback and to provide additional input as to the suitability of suggested goals. Again, discussion is for clarification purposes and not debate.

STEP 8**SYNTHESIZE FEEDBACK**

The feedback is analyzed in the same manner as in Step 6. Any additional comments or suggestions are incorporated with those obtained with the first review step. These final results are the basis for making changes and final decisions on selected goals for the special population under consideration. The extent of agreement with the goal indicates the support of the participants for attaining them. Comments provided throughout the process may illuminate some of the difficulties and benefits associated with the attainment of suggested goals.

STEP 9**SUMMARIZE RESULTS**

The results of the review process should be summarized in a report which can serve as input for decision makers to consider in revising or finalizing the list of suggested goals.

SAMPLE MODIFICATIONS

The interactive approach to reviewing goals for special populations may be modified to include a prioritization process. To accomplish this, participants would be asked to make decisions on the relative importance of goals by rating or ranking each. This would occur after the final discussion of feedback. For a more thorough discussion of prioritization procedures, the reader is asked to refer to the section within this chapter which discusses prioritization of goals.

If there exists the likelihood that participants from a particular group(s) will be inhibited in voicing their opinions because they feel less knowledgeable than the other participants in the area of vocational education or the target population, it may be advisable to conduct separate review sessions for different groups. There is a trade off in this situation, however. Being exposed to other points of view may serve to create an awareness among the various groups of participants as to the perceptions and attitudes of their colleagues, which in turn may foster greater communication and understanding. This could not occur if the review sessions are conducted separately.

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NON-INTERACTIVE REVIEW PROCESS

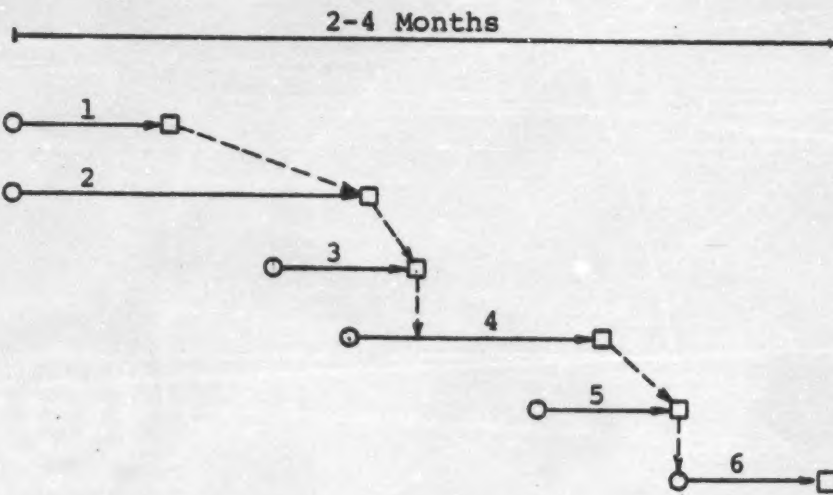
NON-INTERACTIVE REVIEW PROCESS (WITH TWO REVIEWS)

CONSTRAINT

OUTCOME

ACTIVITY

LEGEND: ○ START POINT



Steps:

1. Select Respondents
2. Develop and Send the Review Form
3. Analyze Responses
4. Develop and Send the Second Review Form
5. Analyze Responses to the Second Review Form
6. Summarize Results

OVERVIEW

The non-interactive goal review process is a means of obtaining input from a variety of sources without assembling them in a group setting. It is a process by which responses to previously formulated goals are solicited and feedback is provided to respondents until an adequate amount of information is obtained. Dependent upon the amount of desired information and whether a consensus of respondent opinion is to be achieved, the review process can involve as few as one or as many as three rounds of questioning and analyses of responses. The first round consists of sending the list of formulated goals to a representative sample of respondents. The analysis and synthesis of the responses form the basis for the goals and related information to be included in the second review form. Participants are requested to respond to each form by reviewing the list of goals, adding or deleting any goals, requesting clarification and providing comments. This process continues until the desired information or degree of consensus are obtained.

KEY CONSIDERATIONS

The major expense of the non-interactive approach is staff time which increases with the number of respondents and the amount of information desired. Additional costs include postage, long distance telephone service and form reproduction.	COST
The non-interactive approach requires the intermittent involvement of one staff member with expertise in sampling techniques. Additionally, two staff members knowledgeable of the State vocational education delivery system and the needs of the populations targeted by the review process should be available on a half time basis to assist in the development of the review forms and the analyses of the responses. Limited clerical and secretarial involvement are also required.	STAFF
The non-interactive approach requires two to four months to complete dependent on the number of respondents, the number of rounds of questioning and the length of the review form.	TIME

No unique facilities or equipment are required to implement the non-interactive approach unless the size of the respondent pool necessitates computer analysis of responses.	EQUIPMENT FACILITIES
Selected respondents must possess suitable qualifications for providing pertinent feedback on suggested goals and exhibit an interest in participating in the process.	PARTICIPANTS
The non-interactive approach can be used to provide feedback on goals for any target population by changing the list of suggested goals and the sample of respondents. It is particularly suitable when it is difficult to assemble individuals in a group setting and/or where there is diverse opinion as to the suitability of various goals for serving special populations. It is also useful in situations where personality conflicts or dominations inhibit the group process.	APPLICATIONS
Feedback provided by the non-interactive process serves to create an awareness and educate respondents as to the perceptions of colleagues and the concerns and intents of the State agency.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

SELECT RESPONDENTS

As with the interactive review process, the following groups should be considered when obtaining feedback on preliminary goals:

- Other State agencies serving special populations
- Local education agencies and other service providers
- Consumer/advocacy groups
- State and local advisory councils
- General public
- Labor organizations

The groups to be represented in the review and feedback process depend upon the point at which the SVEA wishes to obtain input from external agencies or groups. If, for instance, input had been obtained from other State agencies, local education agencies and advocacy groups during the formulation of the preliminary set of goals, those groups may not be required for the review process.

How respondents are selected depends on the size of the group and/or desired participant characteristics. If SVEAs wish feedback from persons knowledgeable of the needs of the target population, they may use a nomination procedure to select respondents. When group size is large, it may be more desirable to select a representative sample of that group to serve as respondents.

STEP 2

DEVELOP AND SEND THE REVIEW FORM

The following items are included in the initial mail contact with the respondents: an initial review form and a cover letter explaining the purpose in sending the form, how the responses will be utilized, instructions for responding and a response date. The review form consists of the list of preliminary goals with related information on each (such as rationale or background information) where available. Respondents are asked to:

- suggest additions or deletions
- request clarification on unclear goals and
- make comments where applicable.

STEP 3

ANALYZE RESPONSES

The responses are reviewed and similar suggestions or comments are collapsed and reworded to convey the intent of different respondents. This can be accomplished by placing each response on a 3x5 card and sorting the cards into stacks of similar responses. A summary statement is written for each stack according to the commonalities among responses.

STEP 4**DEVELOP AND SEND THE SECOND REVIEW FORM**

The feedback obtained from the first review form is the basis for the second form. The statements summarizing comments or suggestions are added to the list of preliminary goals and sent to respondents for further review. The instructions are similar to those of the initial form: Respondents are again asked for suggestions on goal additions or deletions and for comments.

STEP 5**ANALYZE RESPONSES TO THE SECOND REVIEW FORM**

These responses are analyzed in the same manner as were the first set of responses. Any additional comments or suggestions are incorporated with those obtained from the initial review form. These final results are the basis for making changes and final decisions on selected goals for the special population under consideration. The extent of agreement with the goals indicates the support in attaining them on the part of the respondents. Comments provided throughout the process may illuminate some of the difficulties and benefits associated with the attainment of suggested goals.

STEP 6**SUMMARIZE RESULTS**

The results of the review process should be summarized in a report which can serve as input for decision makers to consider in revising or finalizing the list of suggested goals for delivering vocational education to special populations.

SAMPLE MODIFICATIONS

The non-interactive approach as described above utilized two rounds of review and feedback. Dependent upon the needs of the State agency, more or fewer rounds could be employed. For instance, if the intent of the State agency is to achieve a consensus of opinion during the review process, it may be necessary to conduct an additional 1 to 3 rounds. On the other hand, if time constraints are limiting and the purpose of the review process is to gain input from only one group (such as the general public), one round may be sufficient.

Another modification of the non-interactive approach is to incorporate prioritization of the goals into the final review step. This can be accomplished by including a rating or ranking form along with the feedback information described in Step 4 and asking respondents to make decisions on the relative importance of the suggested goals. For a more thorough discussion of prioritization procedures, the reader is asked to refer to the next section within this chapter.

FOR ADDITIONAL INFORMATION

Delbecq, Andre L., Van de Ven, A. H., & Gustafson, D. H.
Group Techniques for Program Planning: A Guide to
Nominal Group and Delphi Processes. Glenview, IL:
Scott, Foresman and Company, 1975.

PRIORITIZATION OF GOALS

In order to establish which goals are deemed most appropriate for achievement by special needs planners, prioritization procedures are employed for determining their relative importance. Priority decisions are based on national issues and concerns with respect to the special population being addressed and input from local educational agencies, consumer/advocacy groups and the general public. Input on the relative importance of goals can be obtained during the formulation or review process or prioritization can be approached as a separate procedure after the goals have been reviewed and finalized.

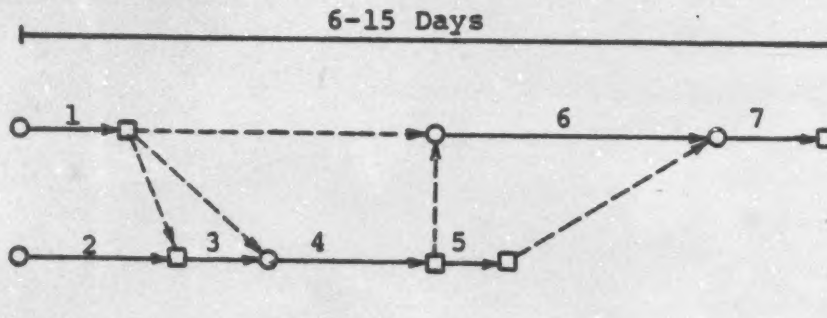
Within the section on formulation of goals, two prioritization procedures were described as components of procedures. These may be isolated and used as alternatives for prioritization at this stage of goal development. Described within this section are two additional prioritization procedures. The Edwards' Multi-Attribute Utilities Method, as applied to the prioritization of goals, allows special needs planners to evaluate suggested goals on the extent to which they maximize important values. The second approach provides a means for weighting priority responses either to equalize input across groups or to differentially weight priority responses provided by a particular constituent group(s).

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EDWARDS' MULTI-ATTRIBUTE UTILITIES METHOD

EDWARDS' MULTI-ATTRIBUTE UTILITIES METHOD

LEGEND: ○ START POINT — ACTIVITY □ OUTCOME - - - - - CONSTRAINT



Steps:

1. Aggregate Prioritization Information
2. Identify Relevant Value Dimensions
3. Rank Value Dimensions
4. Rate Value Dimensions
5. Convert Weight Values to Normalized Scores
6. Rate Goals on Each Dimension
7. Determine Priority Scores

OVERVIEW

The multi-attribute utilities approach as applied to the prioritization of goals quantifies the values affecting priority decisions. Based on information about issues or factors that should influence priority decisions, decision-makers within the State agency evaluate suggested goals on the extent to which they maximize important values.

The completion of the process involves several steps. First, factors affecting the importance of goals, such as historical trends in serving special populations, national issues and assessment information, are aggregated. The relevant value dimensions on which to base priority judgments are determined and ranked in order of importance. To obtain ratios on the differences in importance between the ranked value dimensions, they are rated on a scale of 0 to 100, with 0 being the least important and 100 being the most important. The importance weights are converted to normalized scores whose sum equals 100. Individuals involved in the prioritization process are presented with the goals and information on factors affecting their importance. They are asked to rate each goal on each value dimension on a scale of 0 to 100. The priority score for a goal is calculated by multiplying each goal rating on a value dimension times the importance weight of the value dimension and summing the products. Priority scores for each goal are compared, and those with maximum values are selected for inclusion in the plan.

KEY CONSIDERATIONS

The main factor contributing to the expense of the multi-attribute utilities approach is the amount of staff time involved. Depending upon whether the rating form is sent to participants or they are brought together as a group, expenses may also include postage or meeting room charges, minimal supplies, and duplication of the rating form.	COST
The multi-attribute utilities approach requires the involvement of at least one full-time staff member to coordinate the tasks and several staff members to participate in the generation and rating of value dimensions.	STAFF
Time requirements are approximately 5-10 days for preparation (organizing the information input, generating and rating the value dimensions, and developing the rating form) and 1-5 days for prioritization.	TIME

No unique facilities or equipment are required for implementation, with the possible exception of a meeting room.	EQUIPMENT FACILITIES
Participants outside the State agency are not involved in this procedure.	PARTICIPANTS
The multi-attribute utilities approach can be used to prioritize goals for any target population. Because it involves a mathematical weighting process, it is particularly suitable when there are factors affecting priority decisions that vary in degree of importance.	APPLICATIONS
The multi-attribute utilities approach forces a delineation of the considerations in selecting goals and an examination of the differences in their importance.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

AGGREGATE PRIORITIZATION INFORMATION

In utilizing Edwards' multi-attribute utilities method for prioritizing goals, several types of information should be gathered for use as input. Information or factors that can affect the relative importance of goals should be considered. These factors include:

- national issues and concerns with respect to the special populations;
- the historical trends in serving special populations; and
- the discrepancies between 'what is' and 'what should be' in terms of the current status of vocational service delivery to special populations.

In addition, the summarization reports which were the outputs of the goal formulation which would impact on three of the key tasks of this procedure: identifying the value dimensions on which goals will be judged (Step 2), rating the value dimensions (Step 4), and rating the goals on each value dimension (Step 6). Each report represents a consensus of opinion from the various groups which participated in the goal formulation and review processes. In addition it summarizes their comments and suggestions as to the relative importance of the goals and the factors which influenced their opinions. This information should be brought to bear on the final decisions made in Steps 2, 4 and 6.

STEP 2

IDENTIFY RELEVANT VALUE DIMENSIONS

The task in Step 2 is to determine the factors on

which goals will be evaluated. These factors represent standards against which the importance of goals can be judged. The following list identifies several factors which should be considered as standards or value dimensions:

Example Value Dimensions

- responsive to national issues;
- responsive to documented needs;
- the size of the discrepancy between what is and what should be;
- realistic in light of historical trends in serving special populations;
- realistic in light of available resources;
- the expected outcome of the goal--the extent and magnitude of the change it will produce; and
- feasibility for attainment at the local level.

The number of value dimensions should generally not exceed eight. More than that becomes too cumbersome in the final steps of the prioritization process.

STEP 3**RANK VALUE DIMENSIONS**

The task in this step is simply to rank order the dimensions with respect to their relative importance for prioritizing goals.

STEP 4**RATE VALUE DIMENSIONS**

To determine the ratios of differences between dimensions (i.e., how much more important one dimension is than another), they are rated on a scale of 0 to 100. This is accomplished by assigning a value of ten to the least important dimension. Then the second least important dimension is assigned a weight value that reflects how much more important it is than the first dimension. The rating continues until all dimensions have been assigned weight values. The process typically requires rechecking and re-adjusting the values to ensure that the ratios between weight values reflect the ratios of perceived relative importance. Thus, if dimension 7 has a weight value of 80 and dimension 3 has a weight value of 20, dimension 7 is 4 times as important as dimension 3.

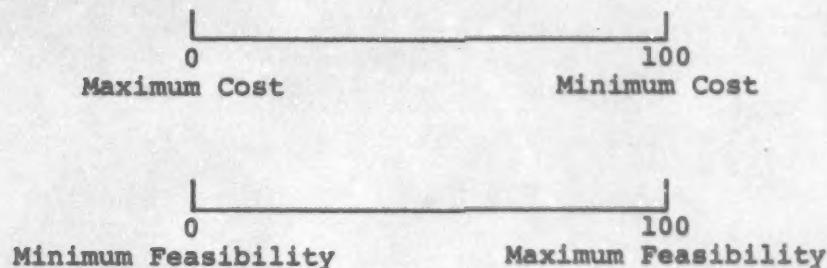
State agency staff involved in the process of rating the value dimensions must arrive at a consensus as to the relative importance of these dimensions. This can be accomplished through a group discussion, taking into account input from other relevant groups and agencies (which is summarized in the goal formulation and review reports) as to their perceptions of the factors affecting the importance of goals.

STEP 5**CONVERT WEIGHT VALUES TO NORMALIZED SCORES**

The conversion process involves performing a linear transformation on the weights in order to make their sum equal 100. This is accomplished by summing the weight values, dividing each by the sum and multiplying by 100.

STEP 6**RATE GOALS ON EACH DIMENSION**

Each goal is rated on each dimension according to a scale of 0 to 100, with a low score indicating a negative attribute of the dimension and a high score indicating a positive attribute of the dimension. In this way the rated scores on negative and positive dimensions are equalized. The following example illustrates this principle.



The pole anchors are reversed in the above example because low cost is desirable, whereas a low feasibility rating is not. The same result; i.e., a high score being a desirable attribute of a goal, can be accomplished by keeping the anchors equivalent but assigning a minus sign to the rating score on negative dimensions.

Again, the staff involved in the rating process must reach a consensus on the values assigned to each goal. Where discrepancies occur, a group value can be achieved either mathematically by averaging the individual rating scores for each goal or through a group discussion. Here, too, it is important to interject and consider the opinions of participants in the goal formulation and review process (obtained from the summarization reports) as to the relative importance of goals.

STEP 7**DETERMINE PRIORITY SCORES**

The final step in the process is to determine the priority scores for each goal. This is accomplished by multiplying each dimension weight (Step 5) by the rating of the goal on that dimension (Step 6) and summing the products.

Once this is completed for every goal, the priority scores can be compared to determine which goals to select for inclusion in the plan.

The following example illustrates how a priority score is obtained for one goal which has been rated on four dimensions:

Dimension	Weight	Goal Rating	Product
1	60	80	4800
2	30	20	600
3	10	60	600
4	90	10	900
Priority Score (Sum of Products)			6900

FOR ADDITIONAL INFORMATION

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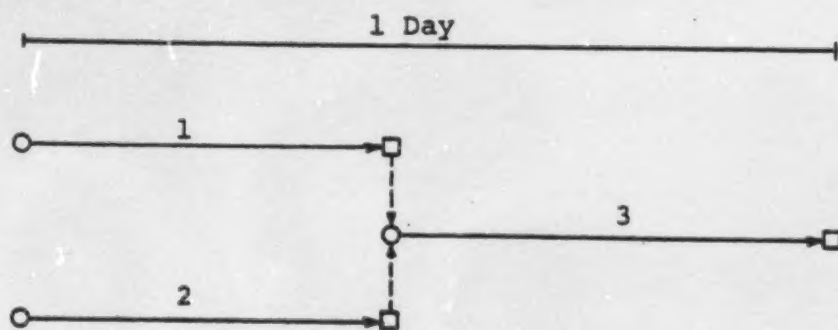
Guttentag, Marcia & Snapper, Kurt. Plans, evaluations, and decisions. Evaluation, 2, 1, 1974, 58-64, 73-74.

Streuning, Elmer L., & Guttentag, Marcia (Eds.). Handbook of Evaluation Research. Beverly Hills: Sage Publications, Inc., 1975.

WEIGHTED MEANS PRIORITIZATION

LEGEND: ○ START POINT
 — ACTIVITY
 □ OUTCOME
 - - - - - CONSTRAINT

WEIGHTED MEANS PRIORITIZATION



Steps:

1. Aggregate Priority Responses
2. Weight Groups
3. Calculate Goal Priorities

OVERVIEW

This approach to the prioritization of goals for special populations incorporates a procedure for weighting the ranked or rated priority responses. In situations where goals are prioritized by a number of different constituent groups, it may be desirable to weight priority responses in order to either 1) equalize the input across groups when the group size varies, or 2) increase the emphasis on the input provided by a particular constituent group(s).

The rated or ranked priority responses provided by members of the various groups are collected. If the purpose is to equalize input, the priority responses are separated by constituent group, then a group mean priority score is obtained for each goal within each group. In this approach each group is allotted one vote regardless of the number of group members participating in the goal prioritization so that all groups carry the same weight in the final prioritization.

If, on the other hand, the purpose for weighting responses is to differentiate among various sources of input, the procedure would be as follows: 1) separate priority responses by constituent groups, 2) obtain a group mean priority score for each goal within each group, 3) rank constituent groups in order of the relative significance of their input, 4) rate the groups on a scale of 0 to 100 to determine the magnitude of difference among them, and 5) multiply the weight value for each group times the group priority score for each goal within each group. This last step produces the weighted priority scores. The aggregated weighted priority score for each goal is obtained by summing the weighted scores across group.

KEY CONSIDERATIONS

The main factor contributing to the expense of this approach to prioritization is the staff time involved.	COST
The weighted means prioritization approach requires the involvement of at least one staff member to perform the calculations and one or more staff members (whichever is desired) to assign the weight values.	STAFF
Time requirements are approximately a half-day for assigning weight values to groups and a half-day for performing the calculations.	TIME

No unique equipment or facilities are required.	EQUIPMENT FACILITIES
Not applicable to this procedure.	PARTICIPANTS
The weighted means prioritization can be used to prioritize goals for any target population. This is particularly suitable when it is desirable to weight priority responses to either 1) equalize the input across groups when the group size varies, or 2) increase the emphasis on the input provided by a particular constituent group(s).	APPLICATIONS
Not applicable to this procedure.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

AGGREGATE PRIORITY RESPONSES

Goals may have been rated or ranked either through a mailed survey or in a workshop setting. The priority scores obtained through one of these procedures are collected and collated according to the various constituent groups whose input they represent.

STEP 2A

WEIGHT GROUPS EQUALLY

In situations where the number of persons representing a constituent group in the prioritization process varies across groups, SVEA's may wish to adjust the priority scores such that all groups have an equal say in the determination of which goals to include in the final plan. This can be accomplished by calculating for each group a mean priority score for each goal.

STEP 2B

WEIGHT GROUPS DIFFERENTIALLY

It may be the case that the SVEA wishes to place differential emphasis on the input of particular groups in the prioritization. For instance, the SVEA may want to place greater emphasis on the input they receive from local educators and advocacy groups.

If this is the case, differential weighting can be accomplished through the following substeps:

1. Separate priority responses by constituent groups.
2. Obtain for each group a mean priority score for each goal rated by that group.
3. Rank constituent groups in order of their relative significance of their input. (It is possible for more than one group to have the same ranked score if equal emphasis is placed on their input.)
4. Rate the groups on a scale of 0 to 100 to determine the magnitude of difference among them -- this is accomplished by assigning the weight value of ten to the group with the lowest ranking. The second lowest ranking group is assigned a weight value that reflects how much more emphasis the SVEA would like placed on input received from the second group than the first group. This continues up the list until all groups are assigned weight values. The process typically requires rechecking and readjusting the values as the list of weighted groups is increased to ensure that the ratios between dimensions maintain accurate representation. If more than one SVEA member is involved in assigning values to different constituent groups, the final weight value may be arrived at through a consensus of opinion or by averaging individually assigned values. (Again, two or more groups may have the same weight value.)

STEP 3

CALCULATE GOAL PRIORITIES

If the groups are weighted equally, then the weighted priority score for each goal is obtained by summing the group mean priority across all groups rating the goal. If the groups are given differential weights, then the weighted priority score for each goal is calculated by 1) multiplying the weight value for each group times the group priority score for each goal within each group and 2) summing these scores across each goal. Calculating weighted priority scores in the case of differential group weights is illustrated in the following table.

DIFFERENTIALLY WEIGHTED GOAL PRIORITIES BASED ON INPUT RECEIVED FROM TWO GROUPS

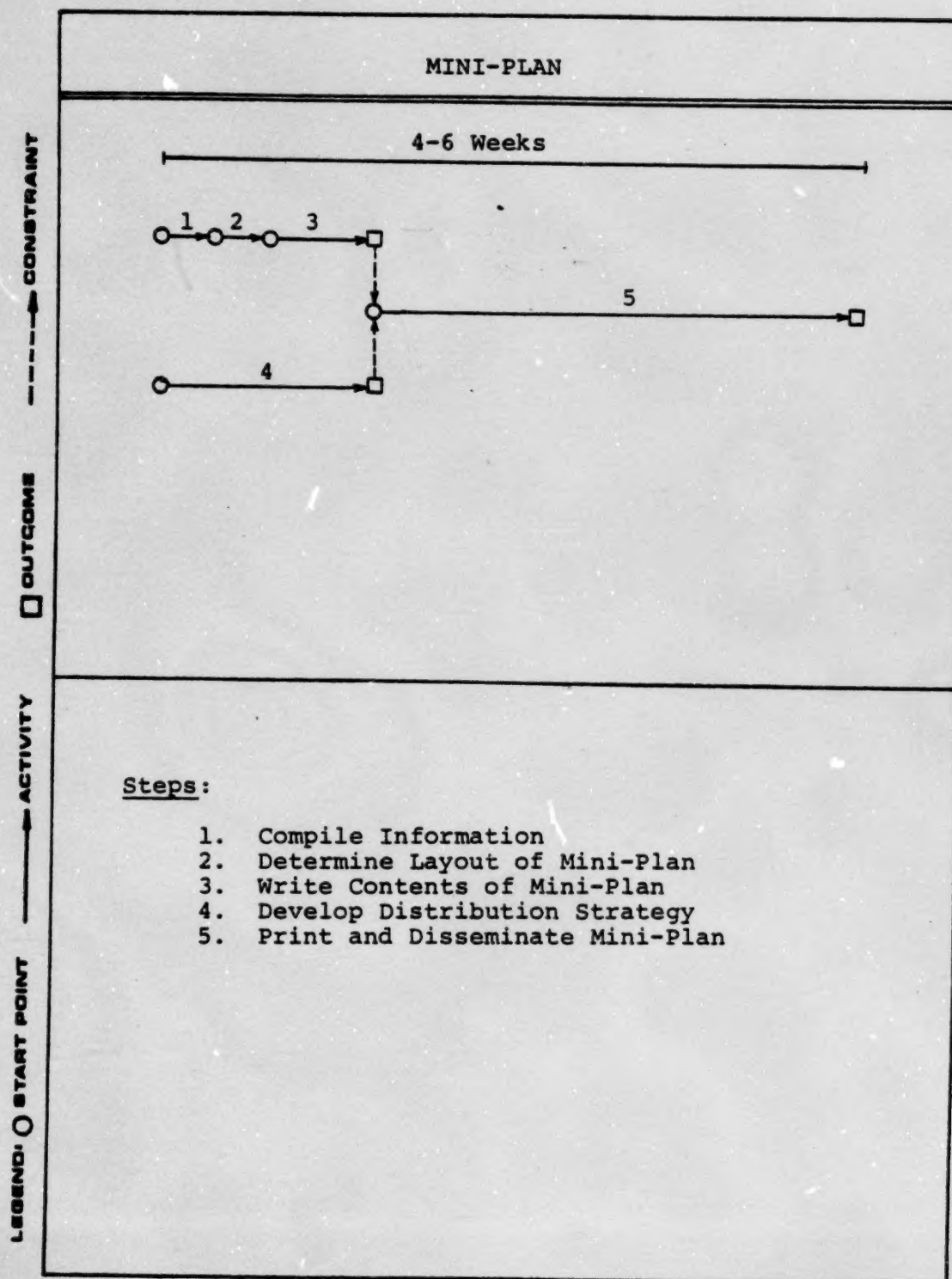
Goal	Group 1 Priority Score	X	Group 1 Weight Value	=	Group 2 Priority Rating	X	Group 2 Weight Value	=	Sum of Weighted Averages	Goal Priorities
1	6.5	X	30	= 195	8	X	10	= 80	275	2
2	9	X	30	= 270	10	X	10	= 100	370	1
3	4	X	30	= 120	6.5	X	10	= 65	185	4
.										
.										
.										
.										
N	4.5	X	30	= 135	8	X	10	= 80	215	3

DISSEMINATION OF GOALS

The final stage of goal development is the dissemination of the prioritized goals addressing the needs of special populations. Apart from dissemination through issuance of the State plan to various public and private sources, public availability of statewide goals for special populations can be assured through three approaches presented in this chapter. Mini-plans are a means of widely disseminating a synopsis of State agency goals, objectives and planned activities in a format more readable and less expensive to produce than a complete State plan. The second dissemination approach is to develop and distribute a one-page flyer containing a synopsis of the goals and objectives that have been formulated by the special needs planners. A final alternative presented in this chapter is dissemination through scheduled agency activities. This involves a brief presentation of the goals and objectives for special populations at such activities as training workshops, interagency conferences and meetings with the State Vocational Association and advisory councils.

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MINI-PLAN



OVERVIEW

The mini-plan provides an effective means for disseminating key information from the 5-year State plan. It is more cost-effective than dissemination of the entire plan and thus allows for circulation on a broader basis.

Developing the mini-plan involves gathering the necessary information for inclusion in the mini-plan. Types of information typically included are the statewide goals and their corresponding objectives, actual and projected enrollment figures by vocational area, funding figures, geographic distribution of existing vocational facilities and new programs being funded or facilities under construction.

Once the necessary information has been compiled, the next step is to decide on the format or layout of the material. Decisions are made on what information is to be presented as text, what will be organized into graphs, tables and charts and how to lay it out to achieve the greatest visual effectiveness. Once the layout is determined, the text can be written and the tables, graphs or charts drawn.

At this point, a plan for distribution of the mini-plan is developed, including how it will be disseminated and to whom. The mini-plan is then printed and disseminated to the designated agencies, organizations and individuals.

KEY CONSIDERATIONS

The cost of disseminating the mini-plan is less than for dissemination of the entire five-year or annual plan. Expenses include staff time, printing costs, mailing costs and possibly graphic design costs. The number of groups or agencies to which the mini-plan is to be disseminated affects the cost, also.	COST
The mini-plan requires at least one staff member for its development, with the possible addition of a graphic consultant. Necessary skills include writing and graphics design abilities.	STAFF
Time requirements for development are a minimum of 5 days. At least 4 weeks should be allowed for printing and dissemination of the mini-plan.	TIME

Development of the mini-plan requires access to graphic materials and printing facilities.	EQUIPMENT FACILITIES
Not applicable to the procedure.	PARTICIPANTS
The mini-plan can be used to disseminate goals, objectives and other information for any target population. It is particularly suitable in cases where dissemination of the entire plan is impractical.	APPLICATIONS
Besides serving as a dissemination tool, the mini-plan promotes public relations between the SVEA and outside agencies, groups and the general public.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

COMPILE INFORMATION

In designing the mini-plan the first task is to identify and compile the information to be included in the plan. The mini-plan should represent a synopsis of the material contained in the five-year plan for the vocational education of special needs populations. Therefore, key information can be summarized and used as a basis for the mini-plan.

The following are recommendations for the types of information to be considered for inclusion in the mini-plan.

Contents of Mini-Plan

- state-wide goals for the target population and their corresponding objectives--it may be advantageous to state the rationale for each goal, including such factors as assessment information, national issues and historical trends in serving special populations
- actual and projected enrollment figures by instructional areas over a five-year period
- funding information--this might include a description of how funds are requested and allocated, actual and projected funding figures for a five-year period, a breakdown of the distribution of funds and the cost per student by level
- geographic distribution of existing facilities and new facilities under construction
- the types of programs currently being funded and new programs to receive funding
- a listing of key personnel to contact within the State agency for more information or assistance--these might include area consultants, special needs consultants, sex-equity coordinators, etc.

STEP 2**DETERMINE LAYOUT OF MINI-PLAN**

At this point it may be worthwhile to consult a graphic designer or printer on the most visually effective format for organizing the information compiled during Step 1. Decisions must be made on whether to present the various types of information as text or in tables, graphs or figures. Enrollment and funding figures are usually most effectively presented in tables and graphs. In fact, for greater readability and to maintain reader interest, it is advisable that text be used sparingly and only in cases which require background information or clarification. For instance, goals and objectives may be presented in table format followed by text which would contain the rationale for each goal.

STEP 3**WRITE CONTENTS OF MINI-PLAN**

Once the layout has been determined, the text can be written and the tables and figures drawn. Again, it may be worthwhile to solicit the assistance of a person with experience in graphics for the design of the tables and graphs.

STEP 4**DEVELOP DISTRIBUTION STRATEGY**

At this point, it is necessary to decide how and to whom the mini-plan will be disseminated. The decision depends on the available funds and the intent of the State agency as to the extent of circulation of the plans.

The following is a list of agencies, organizations or institutions that can be utilized as possible centers of dissemination.

Possible Dissemination Centers

1. Local education agencies
 - a. P.T.A.'s
 - b. School libraries
2. Education information centers
3. Libraries
 - a. Public libraries
 - b. Community college and university libraries
4. Chambers of commerce

In addition to the above suggestions, there are a number of key agencies and groups within the State to which SVEA's might want to send mini-plans directly.

Target Agencies and Groups for Mini-Plan

- State and Local advisory councils
- Local boards of education
- Other State agencies involved in the delivery of services to the target population
- Special population advocacy groups
- Associations representing business and industry
- Labor unions
- Work education councils
- Career education advisory councils
- Prime sponsors planning councils
- Community-based organizations
- Other social and community groups

STEP 5

PUBLISH AND DISSEMINATE MINI-PLAN

The final step in the dissemination process is to have the appropriate number of copies of the mini-plan printed then sent to the designated agencies and organizations.

SAMPLE MODIFICATIONS

There is no set format for the contents of a mini-plan. Therefore, they can be modified in any way which best suits the purposes and budget of the State agency.

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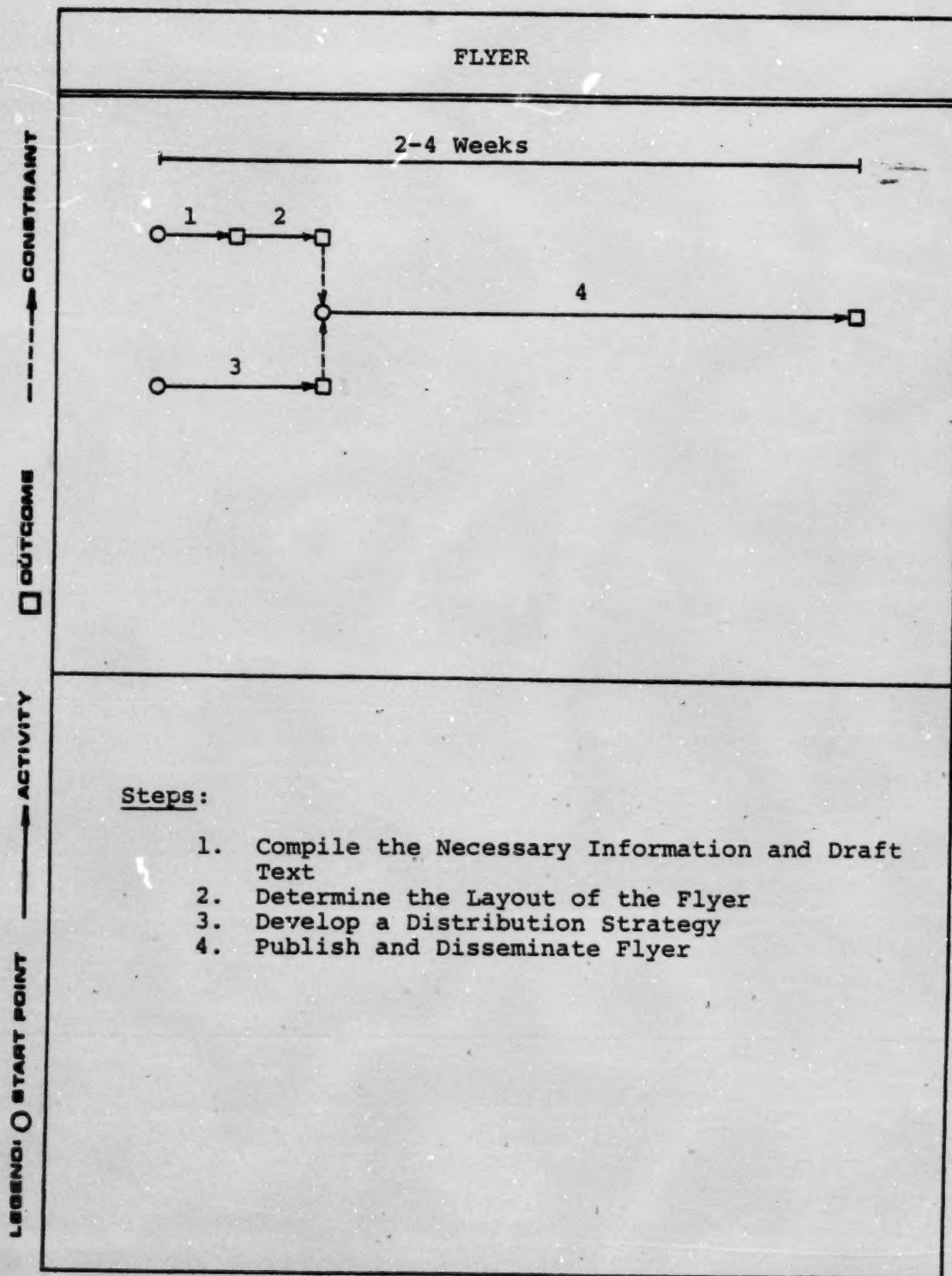
307

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Texas Education Agency, 1977.

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Virginia Vocational Education Mini-Plan: Part II
Annual and Long Range, Fiscal Year 1977-1981.
Charleston, WV: West Virginia Education Agency, 1976.

FLYER



OVERVIEW

The utilization of a flyer provides a relatively cost-effective means of disseminating goals and objectives for special populations. The flyer consists of a one-page synopsis of the goals and objectives that have been formulated by the State vocational education agency. The two main tasks in developing the flyer are designing a format and planning a distribution strategy. The format includes how the material will be presented (in text or table form) and the physical layout of the material. The distribution strategy includes how and to whom the flyers will be circulated. Once these decisions are made, the flyers are printed or duplicated and disseminated.

KEY CONSIDERATIONS

The cost in disseminating a flyer is less than for dissemination of the entire five-year plan, annual plan or mini-plan. Expenses include staff time, printing costs, mailing costs and possibly graphic design costs. The number of groups or agencies to whom the flyer is to be disseminated affects the cost also.	COST
The flyer requires at least one staff member for its development, with the possible addition of a graphic consultant. Necessary skills include writing and graphic design abilities.	STAFF
Time requirements for development are a minimum of 1 day. At least 2-3 weeks should be allowed for printing or duplication and dissemination of the flyer.	TIME

Development of the flyer requires access to graphic materials and printing or duplicating facilities.	EQUIPMENT FACILITIES
Not applicable to this procedure.	PARTICIPANTS
The flyer can be used to disseminate goals, objectives for any target population. It is particularly suitable in cases where dissemination of the entire plan or mini-plan is impractical.	APPLICATIONS
Besides serving as a dissemination tool, the flyer promotes public relations between the SVEA and outside agencies, groups and the general public.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

COMPILE THE NECESSARY INFORMATION AND DRAFT TEXT

The basic information to be used in the flyer consists of the goals and objectives that have been developed by the SVEA. It may also be desirable to state a rationale for each goal including the factors which affected the goal decisions such as assessment information and national issues.

STEP 2

DETERMINE THE LAYOUT OF THE FLYER

At this point, decisions must be made on how to most effectively present the material within budget limitations. For greater readability and to maintain reader interest, it is advisable that large amounts of straight text be avoided. It may be worthwhile to consult someone with experience in graphic design for design and layout of the flyer. The use of tables, figures and designs can make the flyer more visually appealing and effective. Once the layout has been determined, the flyer can be developed.

STEP 3

DEVELOP A DISTRIBUTION STRATEGY

The question of how and to whom the flyer will be disseminated must be resolved before it is printed or duplicated. The decision depends on the available funds and the State agency's intent in disseminating information on its goals and objectives.

The following are suggestions of ways to achieve broad circulation to school personnel and the general public.

Distribution Strategies

- submit to local newspapers across the state
- send to local education agencies for further distribution to school personnel, school libraries and/or P.T.A.'s
- send to public libraries and State university libraries for further distribution to the public
- send to chambers of commerce within the State for further distribution to the general public
- send to education information centers for further distribution to citizens that contact the center
- send to local employment service offices for distribution to ESC clients

In addition to the above suggestions, there are a number of key agencies and groups within the State to which SVEA's might want to send the flyers directly.

Targeted Agencies and Groups for the Flyer

- State and Local advisory councils
- State and Local boards of education
- Other State agencies involved in the delivery of services to the target population
- Special population advocacy groups
- Associations representing business and industry
- Work education councils
- Career education advisory councils
- Prime sponsors planning councils
- Other social and community groups

STEP 4

PUBLISH AND DISSEMINATE THE FLYER

The final step in the dissemination process is to have the appropriate number of copies of the flyer printed or duplicated in a form suitable to the means of dissemination (e.g., as a self-mailing flyer or a single sheet). The flyers are then sent to the designated agencies and organizations.

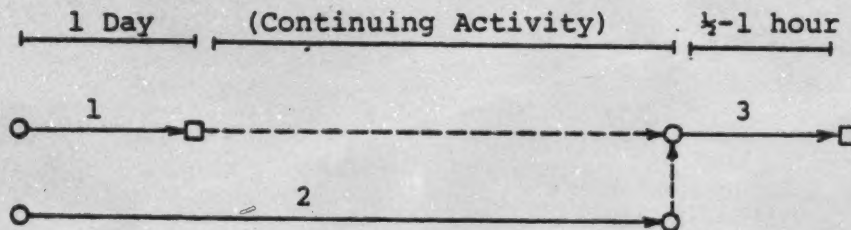
SAMPLE MODIFICATIONS

The contents, length and format of the flyer can be modified in any way which best suits the purposes and budget of the State agency. The flyer can also be used in conjunction with the mini-plan to achieve wider dissemination. The mini-plan can be distributed on a limited basis to select agencies or groups while the flyer can be circulated through local newspapers or libraries to the general public.

DISSEMINATION THROUGH SCHEDULED
AGENCY ACTIVITIES

DISSEMINATION THROUGH SCHEDULED AGENCY ACTIVITIES

LEGEND: ○ START POINT
 — ACTIVITY
 □ OUTCOME
 - - - - - CONSTRAINT



Steps:

1. Prepare a Presentation
2. Identify Appropriate Activities for Dissemination
3. Make Presentation

OVERVIEW

State vocational education agencies can use their normally scheduled activities, such as training workshops, interagency conferences and meetings with the State branch of the American Vocational Association and advisory councils as vehicles for disseminating goals and objectives for special populations. This does not accomplish dissemination to the general public, but it can be used in conjunction with another technique such as the flyer or mini-plan to achieve a more comprehensive distribution of goals and objectives.

A brief presentation is prepared to be given by a State agency staff member involved in the activity. The presentation can include the goals and objectives that have been set for the target population and a rationale for each goal. Other pertinent information such as actual and projected enrollment and funding figures may also be covered in the presentation. At the onset of the training session, workshop, conference or meeting, an SVEA staff member would present the information.

KEY CONSIDERATIONS

The cost of dissemination through agency activities is minimal. Staff time in preparing and delivering the presentation is the only expense.	COST
One staff member is required for preparing and delivering the presentations.	STAFF
Time involved would be a minimum of a half day for preparation and a half hour for presentation. The calendar time required for dissemination would vary depending upon the schedule agency activities.	TIME

No equipment or facilities are required.	EQUIPMENT FACILITIES
Not applicable to this procedure.	PARTICIPANTS
Because dissemination activities have to be coordinated with other scheduled activities, the calendar time involved may be extensive. Personal interaction during the dissemination and the question and answer period can serve to promote public relations between the SVEA and the group participating in the activity.	APPLICATIONS
This means of dissemination can be used for any special population. It is most suitable when budget constraints limit dissemination activities.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

PREPARE A PRESENTATION

A brief presentation of the goals and objectives that have been developed for the target population is written. It should include a rationale for each goal with an explanation of the factors which affected the selection of the goals such as assessment information and national issues. The presentation can also include any additional information considered appropriate, such as actual and projected enrollment figures, funding information and current and new projects.

STEP 2

IDENTIFY APPROPRIATE ACTIVITIES FOR DISSEMINATION

The schedule of State agency activities should be reviewed periodically to identify all situations appropriate for making the presentation. Examples of these activities are training workshops, interagency conferences and meetings with advisory councils and the State branch of the AVA. Also, field visits by the special needs consultants and sex equity coordinators can provide opportunities for dissemination to Local school staff. The presentations should be scheduled for any activity that involves a different group of participants.

STEP 3

MAKE PRESENTATION

An SVEA staff member involved in the activity should be identified to make the presentation. At an appropriate time during the training session, workshop, conference or meeting the presentation should be made with a question and answer period following.

SUPPLEMENT A

State Agencies Serving Special Populations

HANDICAPPED

Vocational Rehabilitation
Mental Health and Mental Retardation
Exceptional Children
Developmental Disabilities
Social Services
Employment of the Handicapped
Public Health
Public Welfare
Blind Service

DISADVANTAGED

Youth Services
Public Welfare
Juvenile Services
Compensatory Education
Social Services
Children and Family Services
Office of Affirmative Action
Women and Minors Employment
Youth Commission
Employment and Training Council
CETA Balance of State

CORRECTIONAL INMATES

Parole Commission
Department of Correction
Adult Probation and Parole
Social Services
Office of Paroles
Office of Probation
Public Welfare

WOMEN

Commission (Council) on Status of Women
Office of Affirmative Action
Women and Minors Employment
Homemakers Services

LIMITED ENGLISH-SPEAKING

Migrant Education
Spanish Community Relations
Spanish-Speaking Peoples Commission

SUPPLEMENT B

**National Professional and Voluntary Organizations
Serving Special Populations**

HANDICAPPED

United Cerebral Palsy Association
National Association of the Deaf
National Federation for the Blind
American Council of the Blind
National Association for Retarded Citizens
Muscular Dystrophy Association
National Multiple Sclerosis Society
National Easter Seal Society for Crippled
Children and Adults
National Foundation - March of Dimes
Council for Exceptional Children
National Rehabilitation Association
American Speech and Hearing Association
President's Committee on Mental Retardation
American Federal of the Physically Handicapped
National Association for Mental Health
Alexander Graham Bell Association for the Deaf
National Foundation for the Handicapped and
Disabled
American Coalition of Citizens with Disabilities
Mainstream, Inc.
National Paraplegia Foundation

DISADVANTAGED

National Urban League

N.A.A.C.P.

Legal Defense Fund

National Institute for Advanced Study in
Teaching Disadvantaged Youth

American Civil Liberties Union

Equal Opportunity Programs, Incorporated

National Center for Urban Ethnic Affairs

National Youth Work Alliance

National League of Cities

National Urban Indian Council

Minority Legal Rights Foundation

WOMEN

National Organization of Women

Women's Equity Action League

President's Advisory Commission on the
Status of Women

National Council of Negro Women

Women's Action Alliance

National Council of Career Women

Women's Legal Defense Fund

National Association of Black Women

National Women's Center Training Project

Alliance for Displaced Homemakers

Equal Rights for Women in Education -
Education Commission of the States

American Business Women's Association

LIMITED ENGLISH-SPEAKING

Mexican-American Council on Education

National Association for Puerto Rican
Civil Rights

Foundation for Mexican-American Studies

Chinese for Affirmative Action

Japanese-American Society

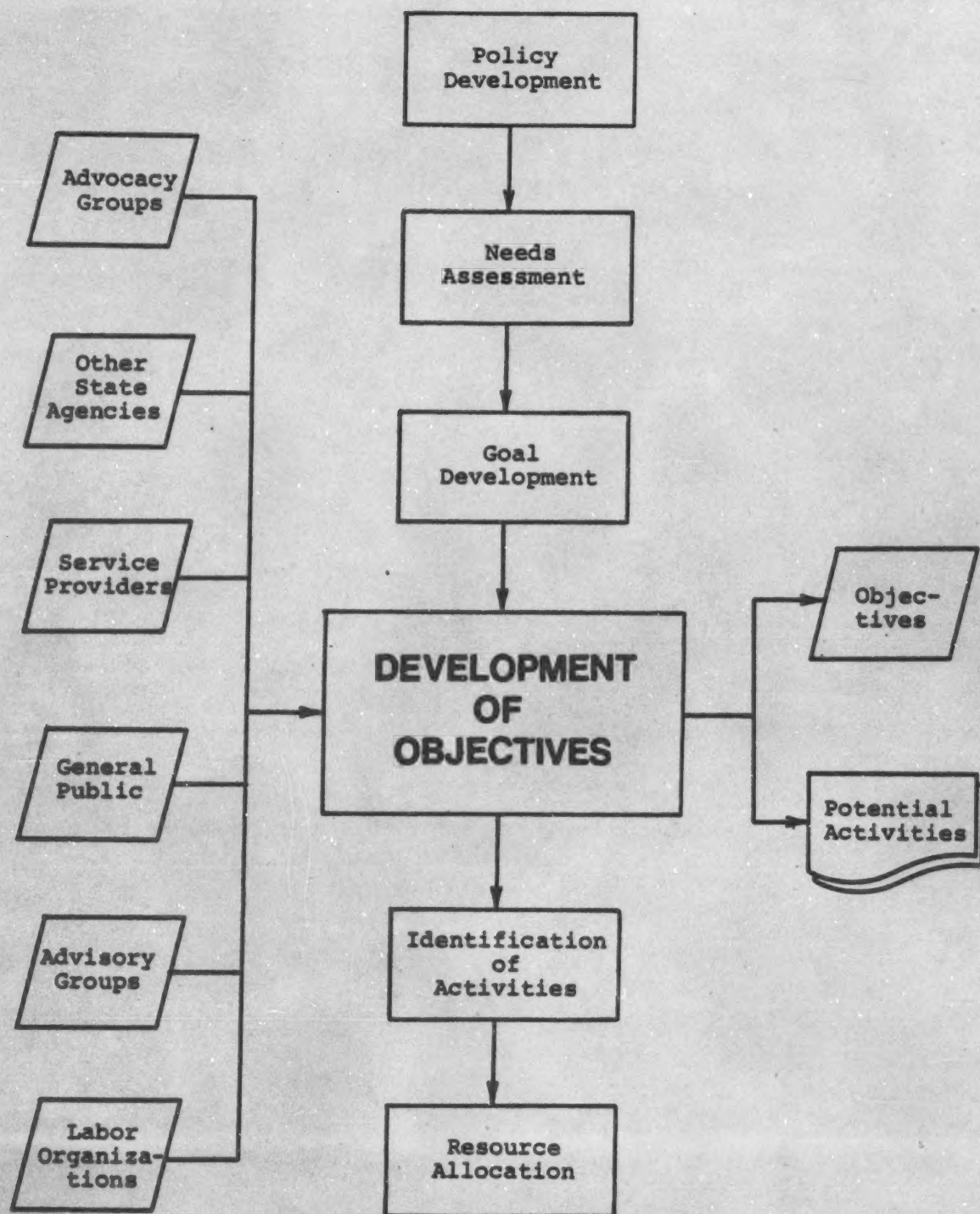
Association for the Advancement of Mexican
Americans

CORRECTIONAL INSTITUTION INMATES

American Correctional Association

American Civil Liberties Union .

CHAPTER SIX



DEVELOPMENT OF OBJECTIVES

Procedures for developing objectives for special populations which correspond to each goal statement compose this chapter of the Vocational E.S.P. Planning System. Objectives describe the outcome conditions which are necessary and sufficient for goal achievement. They serve as a referent in planning programs, services and activities and are the benchmark for subsequent evaluations of progress in achieving goals. This planning component consists of three key activities.

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1. Formulation of Objectives	5
2. Review of Preliminary Objectives	47
3. Dissemination of Objectives	67

There are six characteristics of objective statements which, if incorporated, would serve to enhance their quality. Careful consideration should be given to these characteristics during the formulation and review of objectives.

Characteristics of Products

1. Objectives are consistent and compatible with each other.
2. Objectives are necessary in order to achieve goals; i.e., no superfluous objectives have been included.
3. Objectives are sufficient for goal attainment; i.e., no important objective(s) has been omitted.

4. Objectives are stated in measurable performance terms that lend themselves to specific determination of the extent to which they are achieved.
5. Objectives contain a time frame for their attainment.
6. Objectives appear appropriate and realistic in light of:
 - A. Documented needs of special populations
 - B. Resources available for serving special populations
 - C. Barriers inhibiting the success of special populations
 - D. Current levels of attainment

FORMULATION OF OBJECTIVES

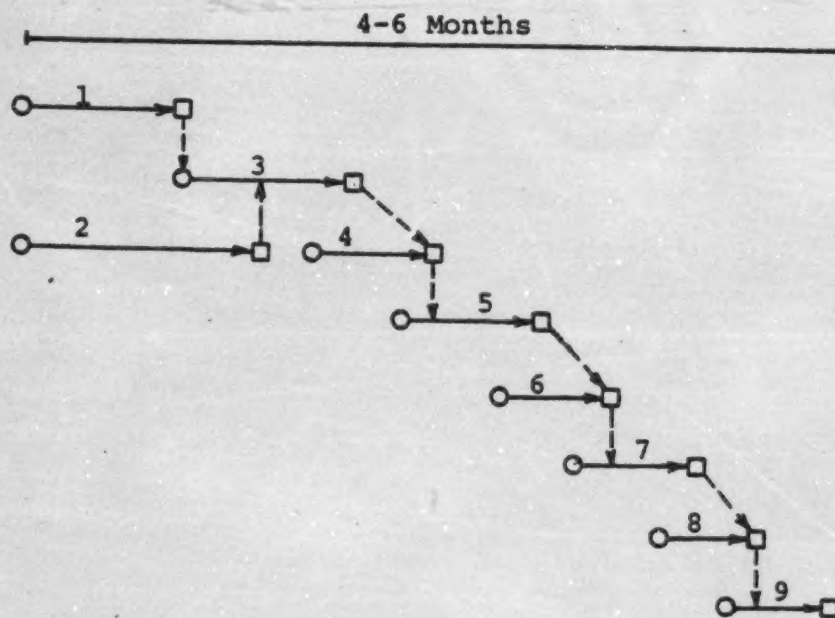
Section 1 includes three approaches to formulating statewide objectives for special populations: 1) the Delphi technique represents an iterative, survey approach through which experts' opinions are tapped. A majority or consensus opinion is reached among the Delphi participants by readministering the survey instrument and including with it feedback from the previous round(s) of questioning. The second approach accomplishes the formulation of objectives in a structured group setting. Individual responses are obtained through a systematic process, and the most appropriate objectives are selected from among the alternatives by a group vote. The final procedure presented as an alternative is in-house brainstorming. It constitutes an internal agency process for formulating objectives and is conducted in an atmosphere with a low degree of structure.

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DELPHI TECHNIQUE

DELPHI TECHNIQUE (WITH THREE ITERATIONS)

LEGEND: ○ START POINT — ACTIVITY □ OUTCOME - - - - - CONSTRAINT



Steps:

1. Prepare Input Information
2. Select Respondents
3. Develop and Mail Out First Questionnaire
4. Analyze First Questionnaire
5. Develop and Mail Out Second Questionnaire
6. Analyze Second Questionnaire
7. Develop and Mail Out Third Questionnaire
8. Analyze Third Questionnaire
9. Summarize Results

OVERVIEW

The Delphi technique is a non-interactive approach to formulating objectives for special populations. It provides a means of soliciting information from a number of experts without assembling them in a group. Responses are obtained by administering the survey instrument in several rounds, each time providing feedback to the respondents on responses obtained during the previous round of questioning. The number of rounds is determined by the amount of information desired and the degree of consensus to be achieved. In the first round the survey instrument, consisting of one or more general questions pertaining to objectives for the special population being addressed by the Delphi, is administered to the sample of experts. The analysis and synthesis of responses form the basis for the suggested objectives which are included in the second survey. During round two, Delphi respondents are instructed to consider each of the objectives. They are asked to provide input as to the suitability of each of the objectives; request clarification where necessary; add any additional objectives; and indicate the most appropriate objectives for each goal. Again, responses are synthesized and feedback is provided during the third round of questioning. This process continues until a satisfactory amount of information is obtained. In most cases, three rounds of questioning are sufficient.

KEY CONSIDERATIONS

The Delphi is a relatively inexpensive technique to implement. The major expense is SVEA staff time which increases with the number of respondents and the amount of information desired. Additional costs include postage, long distance telephone calls and duplication.	COST
The Delphi requires intermittent involvement of one staff member with expertise in survey methodology and research design. Additionally, two staff members knowledgeable of the State vocational education delivery system and the needs of the populations targeted by the Delphi should be involved on a temporary basis to assist in the development of the questionnaires and the analysis of the responses. Limited clerical and secretarial involvement are also required.	STAFF
The Delphi requires three to six months to complete dependent on the number of respondents, the number of rounds of questioning, and the length of the questionnaires.	TIME

No unique facilities or equipment are required to implement the Delphi unless the size of the respondent pool necessitates a computer analysis of responses.	EQUIPMENT FACILITIES
Selected respondents must possess suitable qualifications for answering the Delphi questions and exhibit an interest in participating in the process.	PARTICIPANTS
Delphi can be used to formulate objectives for any target population by simply changing the initial question(s) and the sample of respondents. It is particularly suitable when it is difficult to assemble individuals in a group setting and/or there is diverse opinion as to the suitability of various objectives for serving special populations. It is also useful in situations where personality conflicts or dominations inhibit the group process.	APPLICATIONS
Feedback provided by the Delphi serves to create an awareness and educate respondents as to the perceptions of colleagues and the concerns and intents of the State vocational education agency.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

PREPARE INPUT INFORMATION

Descriptive information on the characteristics of the special population(s) under consideration with respect to each goal should be gathered and prepared for input into the objective formulation process. The descriptive information will consist of available data on the current status of the goal obtained during the needs assessment. It is recommended that this information be organized according to a format that allows for easy and accurate interpretation on the part of those participating in the objective setting process. This can be accomplished by developing a list of the statewide goals with corresponding statements delineating the current status of vocational services to the special population(s) with respect to each goal. The statements of current status might also include barriers to achieving the goal. For instance, if the goal were to increase the enrollment of women in non-traditional vocational programs, the current status statements might include those indicating the present enrollment of women in non-traditional programs, such as:

- Women constitute 15 percent of the total enrollment in T & I programs.
- Women constitute seven percent of the total enrollment in agricultural programs.

They would also include statements indicating barriers to achieving increased enrollment, such as:

- Twelve percent of the women surveyed indicated the lack of adequate facilities (dressing rooms, restrooms) as a barrier to enrollment in non-traditional programs.

- Sixty-seven percent of the women surveyed indicated peer pressure to enter a traditional occupational area as a barrier to enrollment.
- Twenty-two percent of the women surveyed indicated discouragement from guidance counselors as a barrier to enrollment in non-traditional programs.

When preparing the information base to be used as input into the objective setting process, State agency staff should be concerned with providing participants with adequate data related to each goal. This would help insure formulation of comprehensive objectives that are sufficient for goal attainment.

STEP 2

SELECT RESPONDENTS

According to Delbecq et. al. (1975), there are several characteristics which should be considered in the selection of respondents for a Delphi study.

RESPONDENT CHARACTERISTICS

- Respondents feel personally involved in the problem of developing objectives for the special population under consideration.
- Respondents have pertinent information to share.
- Respondents are motivated to include the Delphi task in their schedule of competing tasks.
- Respondents feel that the aggregation of judgments of a respondent panel will include information which they, too, value and to which they would not otherwise have access.

Upon consideration of these characteristics, it would be desirable to select participants that represent other State agencies that are involved in the delivery of services to the special population, Local education agencies, other service providers, and consumer or advocacy groups. A nomination procedure can be used in the selection process by which State vocational education agency personnel identify appropriate respondents. The sex equity personnel and disadvantaged and handicapped coordinators or consultants can provide valuable information on appropriate groups or individuals to be represented on the panel of respondents. Based on the considerations above, a panel of Delphi respondents can be chosen from those persons who were nominated.

STEP 3

DEVELOP AND MAIL OUT FIRST QUESTIONNAIRE

The development of the questionnaire can be accomplished concurrently with the selection of respondents. Constituting the first questionnaire are one or more general questions which are designed to elicit objectives for the special population under consideration. These questions are based on previously determined goals which respond to identified needs of the special population. Additionally, relevant background information pertaining to the questions should also be provided.

Accompanying the first questionnaire should be a cover letter explaining its purpose and delineating how the results will be utilized. Instructions for completing the questionnaire and a response date should also be included.

The initial Delphi questions follow directly from the information base described in Step 1. One question or set of questions should be included for each goal. For the goal example provided in Step 1, an appropriate Delphi question could be phrased:

What objectives do you consider most appropriate for achieving an increase in the enrollment of women in non-traditional vocational programs?

Please base your responses on the information provided you that depicts the current status of enrollments of women in non-traditional programs and barriers to enrollment.

The information supplied to respondents would include all goals for which objectives are to be formulated and corresponding statements which provide available information on the current status of the goal. It may be desirable to include an example of the appropriate format for writing an objective and indicate that responses should fit that format. This format should incorporate the characteristics of an objective statement which were outlined in the chapter introduction. However, it may be more efficient for the State agency staff to transform responses into the correct format during the analysis of the questionnaire. In either case, respondents should be asked to write the objectives in measurable terms and include a suggested time frame for achieving each of the objectives.

A form for responding, such as that portrayed in the following table should be included with the questions.

SAMPLE OF FIRST DELPHI RESPONSE FORM

GOAL	CURRENT STATUS	SUGGESTED OBJECTIVES
● increase the enrollment of women in non-traditional vocational programs	● women constitute 15% of the total enrollment in T & I programs ● sixty-seven percent of the women surveyed cited peer pressure to enter a traditional occupational area as a barrier to enrollment ● ● ●	

A pilot test should be conducted before mailing the initial questionnaire to the Delphi respondents. A small sample of individuals should be chosen for the pilot test which resemble the actual Delphi respondents in terms of their background, expertise, and orientation. Any problems experienced by the test sample should be resolved and modifications of the letter and/or questions made. The questionnaire packet is then mailed to the Delphi respondents shortly after initial contact is made. If response rate is low, a follow-up letter or telephone call may be necessary.

STEP 4**ANALYZE FIRST QUESTIONNAIRE**

The responses obtained from the first questionnaire are used as a basis for the items to be included in the second questionnaire. The results can be synthesized by placing each response on a 3x5 card and combining similar responses into subsets. For each subset of responses an objective statement is written which encompasses the intent of the responses in that subset. Those responses which are not appropriate as objectives but which are more suited to becoming activities for achieving the objectives can be retained for use in the next planning stage, the identification of activities.

It is necessary at this point to examine the group of objectives pertaining to each goal and determine if achieving any of the objectives would conflict with the achievement of another objective(s) in that group. The following example illustrates two objectives suitable for achieving the goal of overcoming sex bias, sex discrimination and sex stereotyping in all materials used in vocational education programs, but which are incompatible with one another.

By August, 1980 develop a resource center for dissemination of materials through Sex Equity Office to serve all vocational education personnel. (Louisiana Annual Program Plan, 1979).

By August, 1980 coordinate the dissemination of bias-free materials with other sex equity personnel within the region through the regional curriculum resource center.

Incompatible objectives need to be identified so that respondents can be provided with an indication of this in the second questionnaire.

STEP 5**DEVELOP AND MAIL OUT SECOND QUESTIONNAIRE**

Those objectives derived in Step 4 constitute the bulk of the second questionnaire. On the second questionnaire

respondents are given the following instructions.

RESPONDENT INSTRUCTIONS
1. Review each of the objectives in light of the goal to which it corresponds. 2. Agree or disagree on the need for each of the objectives. 3. Provide comments regarding any of the objectives. 4. Add any additional objectives. 5. In cases where there are two or more incompatible objectives for any given goal, vote on the most suitable or feasible.

In light of these information needs, the format of the questionnaire should be such that objectives are categorized according to the goal from which they were derived and ample space is provided for the requested feedback. Three columns can be included adjacent to the objectives for respondents to indicate 1) their agreement with an objective, 2) their disagreement with an objective and 3) their choice from among incompatible objectives. Space can be provided between each objective for comments and at the end of a subset of objectives for any additions. A sample questionnaire is provided in the following table.

SAMPLE OF SECOND DELPHI QUESTIONNAIRE

GOALS	OBJECTIVES	AGREE	DISAGREE	VOTE
1. Increase the enrollment of women in non-traditional vocational programs by 1982.	1. Increase the total enrollment in T&I programs by 15%			
	Comments:			
	2. Increase the total enrollment in agricultural programs by 20%.			
	Comments:			
	3.			
	.			
	.			
	4.			
	.			
	.			
	Additional Objectives:			

SAMPLE QUESTIONNAIRE (Cont'd)

GOALS	OBJECTIVES	AGREE	DISAGREE	VOTE
2. By 1982, develop and implement effective strategies for overcoming sex bias, sex discrimination and sex stereotyping in materials used in vocational education programs.	*1. By Aug. 1980 develop a resource center for dissemination of materials through the Sex Equity Officer to serve all vocational education personnel. Comments:			
	*2. By Aug. 1980 coordinate the dissemination of bias-free materials with other sex equity personnel within the region through the regional curriculum resource center. Comments:			
	3.			
	.			
	.			

SAMPLE QUESTIONNAIRE (Cont'd)

GOALS	OBJECTIVES	AGREE	DISAGREE	VOTE
3. . . .	4. . . . Additonal Objec- tives:			

Asterisks indicate objectives which are incompatible with one another.

STEP 6**ANALYZE SECOND QUESTIONNAIRE**

The results of the second questionnaire are analyzed in the following manner.

QUESTIONNAIRE ANALYSIS

- The responses to each objective are tallied and the percentage of respondents who agreed and disagreed with each objective is calculated.
- The number of votes each alternative objective received is tallied.
- The comments provided for each objective are summarized.
- Objectives which were unclear to a large number of respondents are clarified or eliminated.

During the analysis of the second questionnaire, the suggested objectives should be compared with the identified needs of the special population under consideration to determine the degree of consistency between the two. If the Delphi is not producing the desired results, modifications should be made during the development of the third questionnaire. For instance, the Delphi items can be stated in either more general or more specific terms.

STEP 7**DEVELOP AND MAIL OUT THIRD QUESTIONNAIRE**

Contained in the third questionnaire are 1) the objectives, 2) the number of votes each alternative objective received, and 3) a summary of comments for each objective. Respondents are provided with the same instructions that accompany the second questionnaire; that is, they are requested to indicate agreement or disagreement with each objective and to select among alternative objectives where they exist. The comments obtained from the second questionnaire provide participants with a frame of reference regarding the summary of responses and may serve to clarify the intent of the objectives.

STEP 8**ANALYZE THIRD QUESTIONNAIRE**

The procedures for this step are similar to those of Step 6. Additional comments or reactions provided by the respondents are incorporated with those obtained in the second questionnaire. These final results are the basis for identifying vocational education objectives for special populations. The extent of agreement with the items indicates the perceived necessity for attaining the objective. In cases where incompatible objectives exist, the number of votes each receives represents the priority decisions made by the respondents and thus provides a means for selecting from among the alternatives. Comments provided throughout the Delphi process provide more substance to identified objectives and may also illuminate some of the difficulties and benefits associated with attaining the objectives.

STEP 9**SUMMARIZE RESULTS**

The results of the Delphi process should be summarized in a brief report which would include a description of the methodology, a discussion of the results and conclusions

and recommendations. This report serves a dual purpose: it provides a basis for decision-making in selecting objectives for delivering vocational education and support services to special populations and can be used as a vehicle for providing feedback to Delphi participants.

SAMPLE MODIFICATIONS

The procedures presented above for conducting a Delphi study utilized three rounds of questionnaires. The number of rounds may vary depending upon the information needs of the planners. For instance, if the intent of the Delphi is to update or expand objectives for a particular goal, administering two questionnaires may be sufficient; whereas, a fourth and fifth round of questionnaires may be necessary in cases which require further consensus or clarification. It is possible to reduce time and cost by including in the Delphi questionnaire only those objectives which are subjects of considerable disagreement or by sending later editions of the questionnaire only to those respondents whose opinions differ from the majority.

The Delphi technique can be modified to be conducted in a group setting. With this approach, participants convene and generate objectives in a series of small groups. Upon adjournment of the group sessions, the results are analyzed and then mailed to the participants. The accompanying instructions request that participants vote on alternatives or agree/disagree with the suggested objectives. The participants may then be reassembled for further clarification and expansion of the objectives.

These are only example modifications of the Delphi. The technique essentially represents a means for obtaining a majority or consensus of expert or representative input to decision-making through providing feedback of results. As such, the Delphi can be modified in a number of ways to best suit the information needs of vocational education special needs planners.

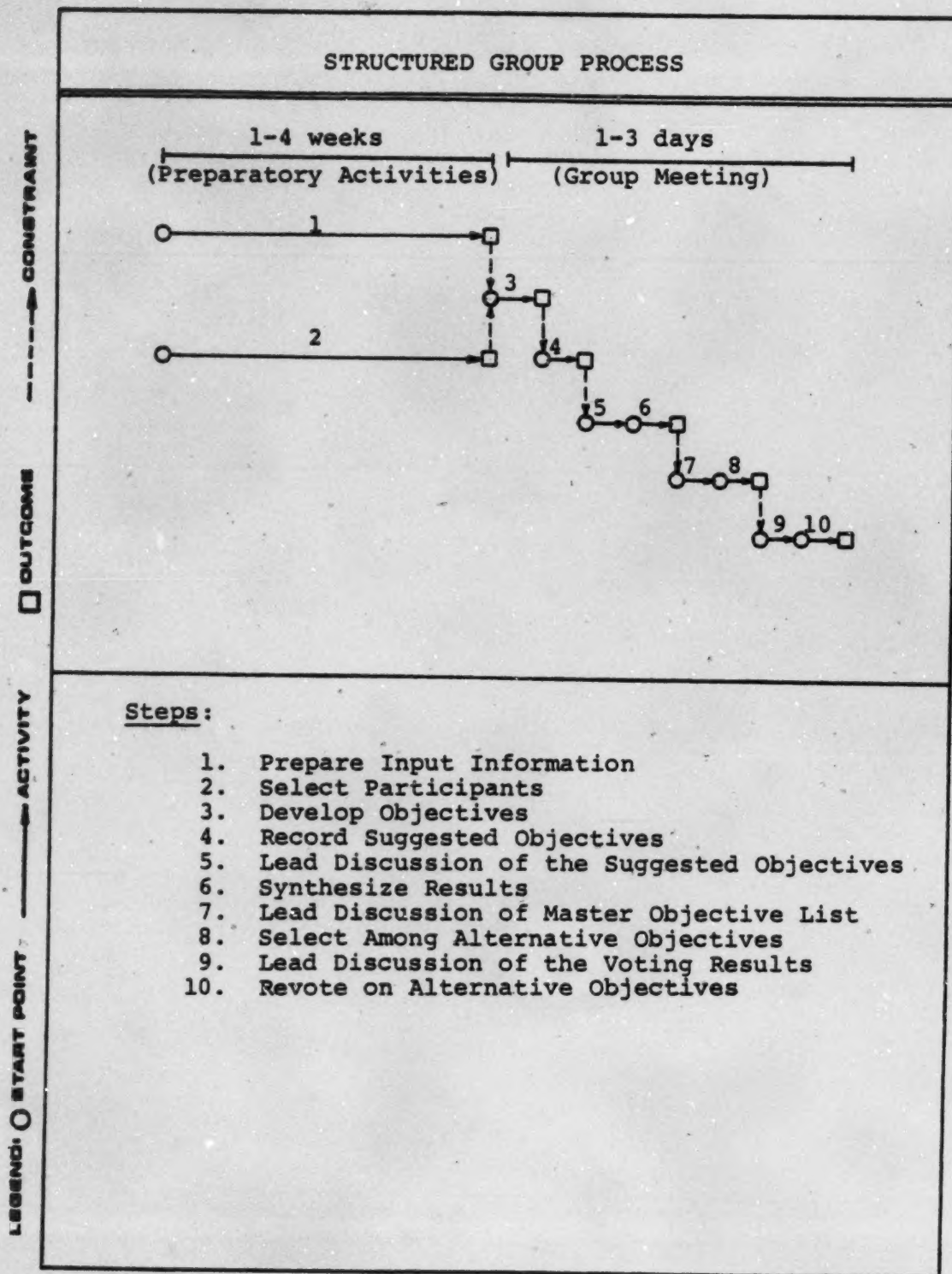
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STRUCTURED GROUP PROCESS



OVERVIEW

As described in this approach, the formulation of objectives is accomplished in a structured group setting. This technique provides a systematic means of soliciting individual responses and aggregating group judgments through a voting procedure. It serves to facilitate the generation of a large number of objectives for a particular special population and the selection of the most appropriate objectives from among the alternatives.

During the group process, participants are provided with the goals that were established in the previous planning stage and corresponding statements designating the current status of vocational education and support services available to the special population(s) being addressed. Group members independently generate objectives which respond to the information provided them. The objectives are solicited, one from each member at a time, and recorded on a flip chart by the group leader until the list of suggested objectives from all members has been disclosed in its entirety. Following a brief discussion and clarification of each suggested objective, the statements are examined to determine which are appropriate as objectives and which are more suited to be activities for achieving an objective. The statements are synthesized by combining related objective statements in subsets. A suitable objective that conveys the intent of the related statements is written for every subset by the group leader(s). A master list of the resultant objectives is developed and presented to the participants.

When more than one group is involved in the process, they reconvene to review the master list. At this time, the group examines the objectives for clarity and to determine if any distortion occurred during the synthesization process. Group members select among alternative objectives through a simple voting process.

If increased accuracy in the selection of the most appropriate objectives is desired, two optional steps can be added to the process. A discussion of the preliminary selection results can occur followed by a final voting on alternatives.

KEY CONSIDERATIONS

The structured group process typically involves minimal expense for implementation. Factors contributing to the expense are: 1) staff time, 2) meeting room charges (if any), 3) supplies (minimal), and 4) location of the participants. The number of SVEA staff required depends directly upon the number of groups involved in the process. Typically, one staff member per group is sufficient to serve as both leader and recorder. If the participants are located out of town, other expenses may include long distance phone calls and travel reimbursements.	COST
The structured group process requires that at least one staff member be trained in leading a group(s) through the objective setting process. If there is more than one group, the option exists to have one overall group leader and individual group recorders or leaders for each small group. Important skills include understanding the process, having a strong background in vocational education and the special population under consideration, and possessing the ability to maintain control over a group of people. This procedure requires a minimum of five days in actual preparation and one day for implementation.	STAFF
Time considerations in implementing the structured group process include: 1) physical preparation time (arranging a meeting room and gathering supplies, 2) selecting and contacting the appropriate persons to serve as participants, 3) organizing the information to be provided to participants, and 4) conducting the group meeting. Dependent on the difficulty in identifying participants and scheduling the meeting, the preparatory tasks (1,2&3) require one to four weeks (calendar time) to complete. The minimal time for completing the group process is one day.	TIME

A large enough meeting room to accommodate the number of participating groups is required for implementing the structured group process. Suggested supplies include a flip chart and felt pen for each group, 3x5 cards, pencils and paper.	EQUIPMENT FACILITIES
In order to effectively complete the structured group process, it is essential that participants share a common frame of reference so that they can communicate ideas. Participants must also share an interest in objective development for the special population and be willing to attend a highly structured group meeting.	PARTICIPANTS
The structured group process can be used to formulate objectives for any target population by adjusting the information input and selected participants to fit the population. The technique is useful for pooling individual judgments when a diversity of opinion exists. It is particularly suitable for determining solutions to a singular problem area, such as the development of objectives for a particular goal relating to special populations. Also, the structured group process requires that participants conform to a highly structured format, a situation which some individuals may not be accustomed to or at their optimum level of effectiveness.	APPLICATIONS
The structured group process guarantees balanced participation among members and restricts domination by those individuals who are more expressive or in higher level positions. It also serves to create an awareness among the participants of state and national concerns regarding the special populations and of the perceptions of their professional associates. Participation in the structured group process tends to promote interest in future phases of planning for the special population. The structured group process results in the generation of valuable information for the formulation of objectives and the subsequent identification of activities.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

PREPARE INPUT INFORMATION

Descriptive information on the characteristics of the special population(s) under consideration with respect to each goal should be gathered and prepared for input into the objective formulation process. The descriptive information would consist of available data on the current status of the goal obtained during the needs assessment. It is recommended that this information be organized according to a format that allows for easy and accurate interpretation on the part of those participating in the objective setting process. This can be accomplished by developing a list of statewide goals with corresponding statements delineating the current status of vocational services to the special population(s) with respect to each goal. The statements of current status could include barriers to achieving the goal. For instance, if the goal were to increase the enrollment of women in non-traditional vocational programs, the current status statements might include those indicating the present enrollment of women in non-traditional programs, such as:

- Women constitute 15 percent of the total enrollment in T & I programs.
- Women constitute seven percent of the total enrollment in agricultural programs.

They would also include statements indicating barriers to achieving increased enrollment, such as:

- Twelve percent of the women surveyed indicated the lack of adequate facilities (dressing rooms, restrooms) as a barrier to enrollment in the non-traditional programs.

- Sixty-seven percent of the women surveyed indicated peer pressure to enter a traditional occupation as a barrier to enrollment.
- Twenty-two percent of the women surveyed indicated discouragement from guidance counselors as a barrier to enrollment in non-traditional programs.

When preparing the information base to be used as input into the objective setting process, State vocational education agency staff should be concerned with providing participants with appropriate data related to each goal. This would help ensure the formulation of comprehensive objectives that are sufficient for goal attainment.

STEP 2

SELECT PARTICIPANTS

The selection of participants is a significant factor contributing to the formulation of objectives that would enhance the effectiveness of the vocational education of special populations. A primary consideration in establishing a participant group is knowledge and experience with regard to the special population under consideration. Potential participants include

- representatives from other State agencies involved in the delivery of services to the special population,
- representatives from Local education agencies,
- other service providers, and
- consumers or advocacy group representatives.

Potential participants should be concerned with and aware of problems and barriers affecting the special population. It is also recommended that they share a similar enough frame of reference to enable effective communication among the group. The group need not be homogeneous; however, some commonality in experiential background facilitates communication.

A nomination process can be used by SVEA personnel to identify appropriate participants. Useful resources in this process are State coordinators or consultants on sex equity and for the disadvantaged and handicapped; they may be able to indicate a number of appropriate groups or individuals to be represented among the participants. State agency staff will then make decisions on those persons nominated based on the considerations described above. Those persons selected for participation should be contacted to enlist their cooperation and to coordinate their time schedules for the meeting.

STEP 3

DEVELOP OBJECTIVES

The group meeting is initiated with an explanation of the purpose and importance of the task about to be undertaken. Additionally, an outline of the procedural steps to be followed for developing objectives is presented. Small groups of from five to nine members are formed and participants are provided with the information described in Step 1.

At this point, it may be desirable to provide an example of the appropriate format for writing an objective and indicate that suggestions should fit that format. In doing so, consideration should be given to the quality characteristics of an objective statement which were presented in the introduction of this chapter. However, it may be more efficient for the State agency staff to transform suggested objectives into the correct format after the completion of the group meeting. In either case, participants should be asked to write the objectives in measurable terms and include a suggested time frame for achieving each of the objectives.

The group leader instructs participants to work silently and individually in generating objectives that correspond to each of the goals they have been provided. The length of time for this task varies depending upon the number of goals and is regulated by the group leader. This is to ensure that time allotments are balanced proportionately among the tasks and conformance to the workshop schedule is maintained.

STEP 4**RECORD SUGGESTED OBJECTIVES**

To ensure equal participation among group members, the group leader elicits one objective from each member at a time until all members have disclosed their entire list. As suggested objectives are received, they are recorded on a flip chart in full view of the group. Duplicates are deleted. Discussion of the suggested objectives is not permitted during the recording process.

STEP 5**LEAD DISCUSSION OF THE SUGGESTED OBJECTIVES**

During this stage of the process each objective recorded on the flip chart is discussed in turn. This provides group members the opportunity to request or provide clarification of meaning for the objectives or present a rationale. The task of the group leader during this discussion is to prevent debate on the suitability of particular objectives and to ensure that each objective receives equal attention. When differences of opinion occur, they should merely be recorded.

STEP 6**SYNTHESIZE RESULTS**

A break in the group meeting occurs here to allow the group leader(s) to analyze and organize the results. Similar responses are collapsed and reworded to convey the intent of different participants. This can be accomplished by sorting the suggested objectives into subsets of related statements, then determining which of those statements are appropriate as objectives and which are more suited to becoming activities for accomplishing the objectives. When no actual objective exists for a subset of statements, one should be developed that encompasses the intent of the participants' suggestions. The results of the synthesization process are recorded on a master list. Any surplus informa-

tion produced during the generation of objectives can be retained and used as input into the next planning stage, the identification of activities, where appropriate.

STEP 7

LEAD DISCUSSION OF MASTER OBJECTIVE LIST

The group members reconvene to discuss the results of the synthesization process (if more than one group is involved they converge for the final steps of the structured group process). The master list is reviewed by the group for clarity and to determine if distortion of the intended meaning of the objectives occurred during the synthesization process. No objective is eliminated during this step. The purpose of the discussion is to foster common understanding among participants on the meaning of each objective.

STEP 8

SELECT AMONG ALTERNATIVE OBJECTIVES

In determining the suitability of objectives for which there is one or more alternatives, participants independently vote on which alternative they consider the most appropriate. The voting can be accomplished by having members write their choice on a 3x5 card. The cards are then collected and the votes are tallied on the flip chart for review.

STEP 9

LEAD DISCUSSION OF THE VOTING RESULTS

The results of the voting process are discussed for clarification purposes only. A brief discussion at this point can establish a common set of criteria on which ranking judgments will be based. In addition, a discussion will serve to clear up any problems due to misunderstanding or misinformation.

STEP 10

REVOTING ON ALTERNATIVE OBJECTIVES

The procedures for this step are identical to those presented in Step 8.

SAMPLE MODIFICATIONS

The structured group process may be concluded at Step 8. However, Steps 9 and 10 can increase the accuracy of the participants' judgments, and for that reason, it is desirable to include them. During the discussion of the preliminary vote on alternative objectives, differences due to unequal information, misinformation or misunderstanding of an objective's meaning can be clarified. The additional clarification provided in Step 9 can result in a more accurate final selection of objectives in Step 10.

FOR ADDITIONAL INFORMATION

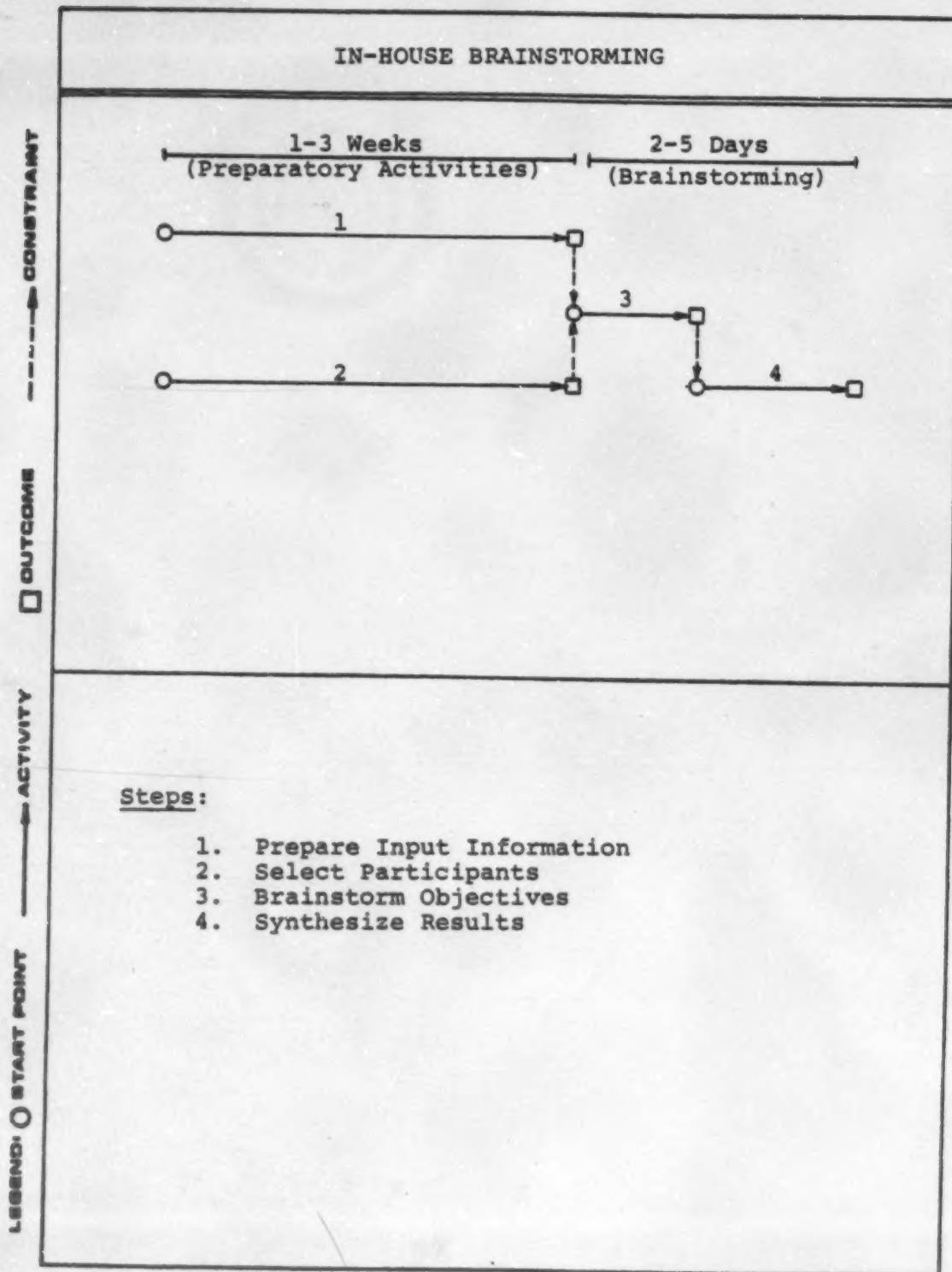
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IN-HOUSE BRAINSTORMING



OVERVIEW

In-house brainstorming can be used as a procedure for formulating objectives for special populations. This requires few resources other than time expenditures on the part of State vocational education agency staff. The procedural format is characterized by a low degree of structure. In generating objectives, each goal is dealt with individually; participants proceed to a new goal only after all ideas for objectives on the current topic have been exhausted. Every idea is recorded. To achieve an effective and productive session, there are several rules which must be followed:

BRAINSTORMING RULES

- No criticism or judgment of ideas is permitted during the session.
- "Free association" is encouraged.
- Quantity is desired.
- Combination of and improvement on suggested goals are encouraged.
- Breaking into small groups for discussion is prohibited.

Due to the fact that the procedure is an internal agency process, input as to the feasibility and importance of the brainstormed objectives should be obtained from other State agencies involved in the delivery of services to special populations, Local education agencies, other service providers and consumer/advocacy groups. This can be accomplished in the next state of objective formulation, review of objectives by groups external to the State vocational education agency.

KEY CONSIDERATIONS

In-house brainstorming involves minimal expense for implementation. The major consideration is staff time which increases with the number of individuals chosen to participate.	COST
In-house brainstorming requires one group leader, one recorder and as many agency staff as are chosen to participate. Leadership skills include the ability to create an atmosphere conducive to a high level of creativity and maintain control over a group of individuals. The procedure requires a minimum of two days preparation time and a half-day for implementation.	STAFF
Time considerations include preparation time (organizing the goals and needs assessment data into a suitable format for input and selecting participants) and conducting the brainstorming session. Depending on the difficulty in organizing the assessment information and in scheduling the meeting, the preparatory tasks require from one to three weeks to complete. The length of the session depends on the information needs of the planners. Minimum calendar time for completing a session is one day.	TIME

A room large enough to accommodate the number of participants is required.	EQUIPMENT FACILITIES
Participants should be experienced with respect to the special population under consideration and share an interest in the planning process. Additional characteristics that are desirable in participants are creativity and the disposition for freely expressing ideas in a group.	PARTICIPANTS
In-house brainstorming can be used to formulate objectives for any target population by changing the input information and the selected participants. It is particularly suitable in situations where time constraints restrict the use of a lengthy procedure.	APPLICATIONS
Because participants are limited to State vocational education staff, the objectives reflect that limitation in that they are not representative of other points of view. Brainstorming may result in the generation of valuable information to be used in the identification of activities for achieving the objectives.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

PREPARE INPUT INFORMATION

Descriptive information on the characteristics of special population(s) under consideration with respect to each goal should be gathered and prepared for input into the objective formulation process. The descriptive information will consist of available data on current status of the goal obtained during needs assessment. It is recommended that this information be organized according to a format that allows for easy and accurate interpretation on the part of those participating in the objective setting process. This can be accomplished by developing a list of the statewide goals with corresponding statements delineating the current status of vocational services to the special population(s) with respect to each goal. The statements of current status could include barriers to achieving the goal. For instance, if the goal were to increase the enrollment in non-traditional vocational programs, the current status statements might include those indicating the present enrollment of women in non-traditional programs, such as:

- Women constitute 15 percent of the total enrollment in T & I programs.
- Women constitute seven percent of the total enrollment in agricultural programs.

They would also include statements indicating barriers to achieving increased enrollment, such as:

- Twelve percent of the women surveyed indicated the lack of adequate facilities (dressing rooms, restrooms) as a barrier to enrollment in non-traditional programs.

- Sixty-seven percent of the women surveyed indicated peer pressure to enter a traditional occupational area as a barrier to enrollment.
- Twenty-two percent of the women surveyed indicated discouragement from guidance counselors as a barrier to enrollment in non-traditional programs.

When preparing the information base to be used as input into the objective setting process, State vocational agency staff should be concerned with providing participants with adequate data related to each goal. This would help ensure the formulation of comprehensive objectives that are sufficient for goal attainment.

STEP 2

SELECT PARTICIPANTS

State vocational education agency staff constitute the pool of individuals from which participants in the brainstorming session will be selected. Ideally, selected participants should possess knowledge and experience with respect to the special population for which objectives are being formulated. Potential participants include State coordinators or consultants for the special populations, teacher-educators in vocational special needs and all other staff with responsibilities for the provision of services to individuals with special needs. Creativity and the ability to freely express ideas in the group are two participant characteristics that will enhance the productivity of a brainstorming session.

STEP 3

BRAINSTORM OBJECTIVES

At the onset of the brainstorming session, the session leader provides participants with the input information as described in Step 1 and defines the rules of the technique.

BRAINSTORMING RULES

- No criticism or judgment of ideas is permitted during the session. Criticism tends to inhibit the sharing of ideas and would, therefore, jeopardize the effectiveness of the technique.
- Free association of ideas is encouraged. Social facilitation sparks creativity and expedites the generation of a large number of ideas.
- Quantity is desired. The greater the number of objectives produced, the greater the likelihood of achieving adequate coverage in responding to assessed needs.
- Combination of and improvement on suggested objectives are encouraged. Expanding upon previously suggested objectives often results in the generation of more and better objectives.
- Breaking into small groups for discussion is prohibited. Like criticism, breaking into small groups is a hazard to the productivity of the brainstorming session. It reduces the chance for social facilitation on which much of the success of the technique depends.

The session leader guides participants through the brainstorming process, one goal at a time, until all ideas for objectives on each goal are exhausted. Attempting to brainstorm objectives for more than one goal simultaneously or switching back and forth among goals can greatly reduce the effectiveness of the technique. Brainstorming characterized by this sort of activity can result in the incomplete coverage of some or all of the goals.

A critical component of the brainstorming session is the written record of all suggested objectives. While it need not be a verbatim recording, the list should be an all-inclusive representation of the ideas generated by the participants.

STEP 4

SYNTHESIZE RESULTS

The results of the brainstorming session provide the basis for the review process which occurs in the next stage of objective development. Input from representatives of Local education agencies, other service providers, and other State agencies involved in the delivery of services to the special population under consideration and consumer/advocacy groups should be solicited. However, the results of the brainstorming session need to be examined and summarized before they are submitted for review. Those suggestions that are more suitable as activities for achieving an objective rather than as an objective itself can be retained for use in a later stage of planning; that is, the identification of activities. Objectives conveying the same ideas can be combined into subsets. It may be necessary at this point to reword or revise ideas so that they conform to the definition and format of a statewide objective, i.e., they are stated in measurable performance terms, contain a time frame for their attainment, etc. In doing this, consideration should be given to the quality characteristics of an objective statement as described in the introduction to this chapter.

SAMPLE MODIFICATIONS

Because of the flexibility of the technique, numerous modifications can be made on a brainstorming process. Brainstorming can be applied to many situations, as it represents a general technique for group problem solving. Planners may expand the panel of participants to include external agencies in the brainstorming process. The brainstorming session may be conducted in a workshop setting with participants breaking into small groups. Each group might brainstorm objectives for a different goal, or the groups may all focus on the same goal with the results being combined at the end of the session. The session itself may be expanded to include a voting procedure during which participants select the most appropriate objectives from among the alternatives. Any such modifications would depend on the information needs of the planners.

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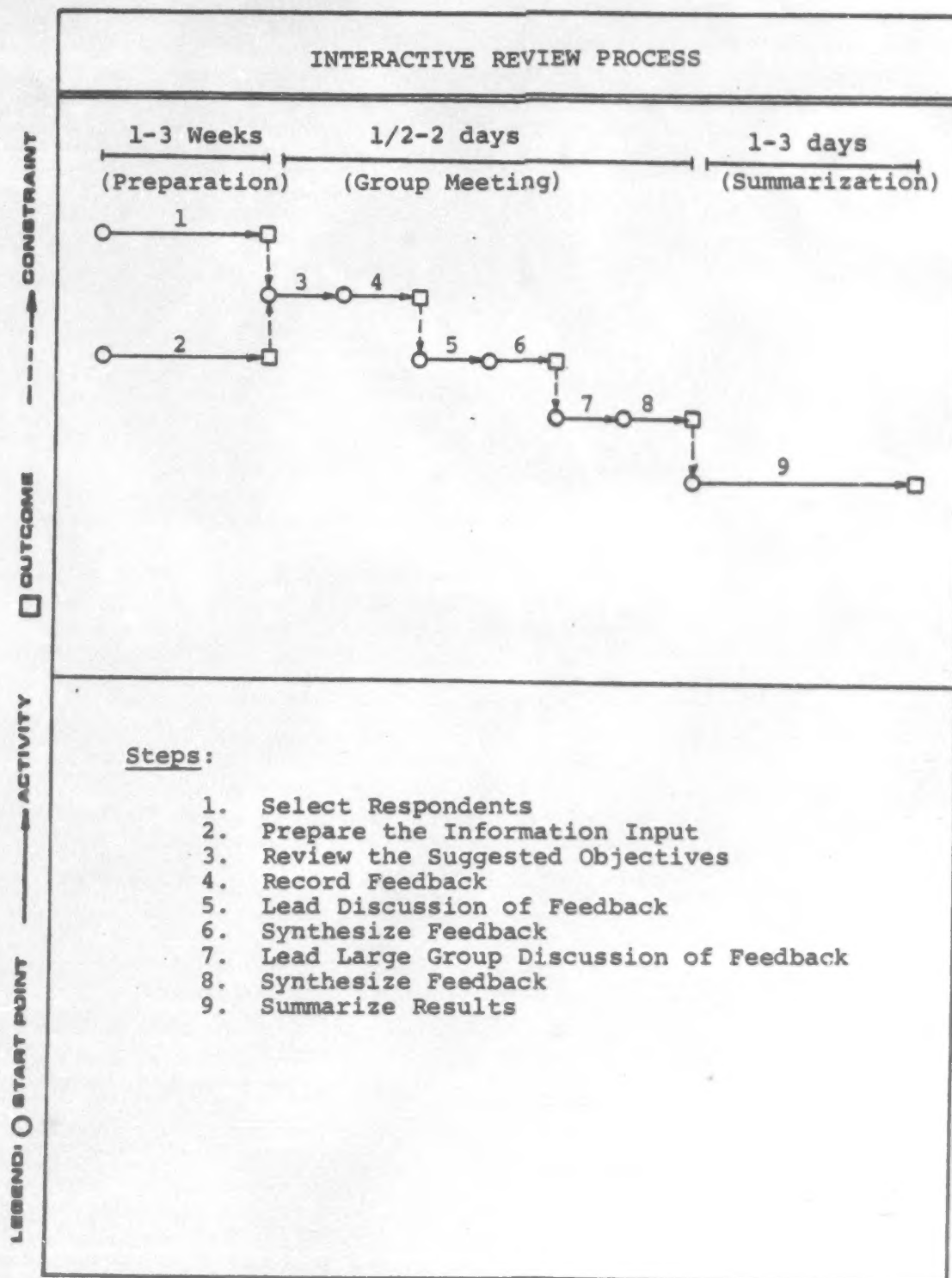
REVIEW OF PRELIMINARY OBJECTIVES

Once objectives have been established for the delivery of vocational services to special populations, they are to be reviewed by groups external to the State vocational education agency. The inputs into the review process are the products of a formulation procedure implemented during the first key activity. Typically, input consists of a list of statewide goals and a list of the objectives that were identified as necessary for their attainment.

This section describes two alternative procedures for reviewing objectives, an interactive approach and a non-interactive approach. The interactive approach involves group participation in a workshop setting, which facilitates balanced participation through the systematic solicitation of responses and structured discussion. The non-interactive approach involves the use of mailed review forms; information is provided and feedback on the objectives obtained from a variety of sources without assembling the participants.

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INTERACTIVE REVIEW PROCESS



OVERVIEW

The interactive review process as described here is a means of obtaining feedback on suggested vocational education objectives for special populations. The approach is conducted in a group setting; however, the highly structured format restricts domination of the session by a few individuals and prevents debates among the participants on the suitability of the objectives.

Participants are provided with a list of goals and the objectives formulated for the attainment of each goal. In addition, supplemental information such as rationales and assessment data are supplied when available along with the list of goals and objectives. Participants are instructed to review the list of suggested objectives and to note comments or suggestions for additions or deletions. Feedback is solicited and recorded, advancing through one objective at a time. Participants discuss the feedback in order to clarify the intent of the suggestions. All additional comments are recorded. In cases where more than one group is involved in the review process, the group leader synthesizes the feedback from the small groups and presents the summary to the entire group of participants for further discussion. New suggestions and comments made during this discussion are also recorded. The results of the review session are summarized in a report to be used by special needs planners in revising the list of suggested objectives. In situations where only one group is participating in the review process, the first discussion of feedback is followed by a synthesis and summarization of results.

KEY CONSIDERATIONS

The interactive approach to reviewing objectives for special populations typically involves minimal expense for implementation. Factors contributing to the expense are 1) staff time, 2) meeting room charges (if any), 3) minimal supplies, and 4) location of the participants. The number of staff required depends directly on the number of groups involved. If the participants are located out of town, other expenses may include long distance phone calls and travel reimbursements.	COST
The interactive approach requires one staff member per group to serve as both leader and recorder. Leadership skills include understanding the process and possessing the ability to maintain control over a group of people. Fulltime staff are required for a minimum of two days preparatory time and one day for implementation.	STAFF
The interactive approach requires one to four weeks (calendar time) to implement depending upon the difficulty in identifying participants and scheduling a meeting time.	TIME

A large enough meeting room to accommodate the number of participating groups is required. Suggested supplies include a flip chart and felt pen for each group, pencils and paper.	EQUIPMENT FACILITIES
Participants must share an interest in the development of objectives for the target population and be willing to attend a highly structured group meeting.	PARTICIPANTS
The interactive review process can be used to provide feedback on objectives for any target population by changing the list of suggested objectives and the sample of participants. The technique is useful for pooling individual judgments when a diversity of opinion exists. It is particularly suitable for dealing with a singular task, such as reviewing objectives for a special population.	APPLICATIONS
The interactive approach guarantees balanced participation among members and restricts domination by those individuals who are more expressive or in higher level positions. It also serves to create an awareness among the participants of the perceptions of the members of various affiliated groups.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

SELECT RESPONDENTS

The following groups should be considered when obtaining feedback on preliminary objectives.

RESPONDENT GROUPS
• Other State agencies serving special populations • Local education agencies and other service providers • Consumer/advocacy groups • Advisory groups • General public • Labor organizations

Some of the above groups may not be required for the review process if input had been solicited from them during the formulation of the preliminary set of objectives.

A nomination procedure can be used to select respondents who are knowledgeable of the needs of the target population. SVEA staff, particularly State coordinators and consultants for the special populations, can identify appropriate groups or individuals to be represented among the participants.

STEP 2**PREPARE THE INFORMATION INPUT**

A list of goals and the corresponding objectives that were formulated for each goal will need to be supplied to the participants of the interactive review process. It is also helpful to provide a brief explanation or rationale for each objective if this information is available. Much of the input information will have been produced during the objective formulation procedure conducted in the previous stage of objective development; that information will need to be organized into a suitable format for the review process.

STEP 3**REVIEW OF SUGGESTED OBJECTIVES**

The review process is initiated with an explanation of the purpose and importance of the tasks and an outline of the procedural steps to be followed. Participants are divided into groups of five to nine members and provided with the list of goals and their corresponding objectives. Participants are instructed to review the objectives independently and to provide feedback in the form of comments and suggestions for additions or deletions.

STEP 4**RECORD FEEDBACK**

To ensure balanced participation among the group members in the provision of feedback, an appointed or elected group leader solicits suggestions and comments on one objective at a time from each group member until all the information has been disclosed. Each comment is recorded on a flip chart which is available for each group's use. No group discussion occurs during this step.

STEP 5**LEAD DISCUSSION OF FEEDBACK**

The purpose of this discussion is to provide clarification of the meaning or intent of suggestions and comments. Therefore, it is necessary that the group leader maintain control over the discussion in order that all comments and suggestions are considered equally by the group. Differences of opinions and additional comments are recorded.

STEP 6**SYNTHESIZE FEEDBACK**

If there is more than one review group, members adjourn while the group leaders organize the feedback. Synthesis of the feedback involves summarizing the comments and suggestions for input into a general discussion. Suggestions or comments conveying similar intents are combined; one statement is written to encompass their meaning. When duplications occur, only one is retained.

If only one group is involved in the review process, Steps 6 and 7 are omitted; Step 8 would follow the discussion of the feedback.

STEP 7**LEAD LARGE GROUP DISCUSSION OF FEEDBACK**

At this point the small groups converge for a final discussion of the synthesized feedback. This provides participants with the opportunity to respond to the feedback obtained in the other small groups. Again, discussion is for clarification purposes and not debate.

STEP 8**SYNTHESIZE FEEDBACK**

Similar procedures are followed as those outlined in Step 6. The results of the large group discussion are incorporated with the feedback obtained from the small groups. The extent of agreement with the objectives on the part of the participants is an indication of their support for attaining them. In addition, comments provided throughout the process may illuminate some of the difficulties and benefits associated with the attainment of suggested objectives.

STEP 9**SUMMARIZE RESULTS**

The final results of the review process in Step 8 serve as input in the finalization and revision of the suggested objectives for the special population goals under consideration. These results should be summarized in a report in order to make the feedback more readily accessible to special needs planners.

SAMPLE MODIFICATIONS

In a review process where feedback is desired from representatives of diverse (in terms of orientation and background) groups of people, it may be advisable to conduct separate review sessions for the different groups. The greater homogeneity may serve to facilitate the expression of opinions and prevent debates that can stem from orientation differences. However, there are disadvantages inherent in this approach. Being exposed to other points of view may serve to create an awareness among the various groups of participants as to the perceptions and attitudes of their colleagues, which in turn may foster greater communication and understanding. This could not occur if the review sessions are conducted separately.

FOR ADDITIONAL INFORMATION

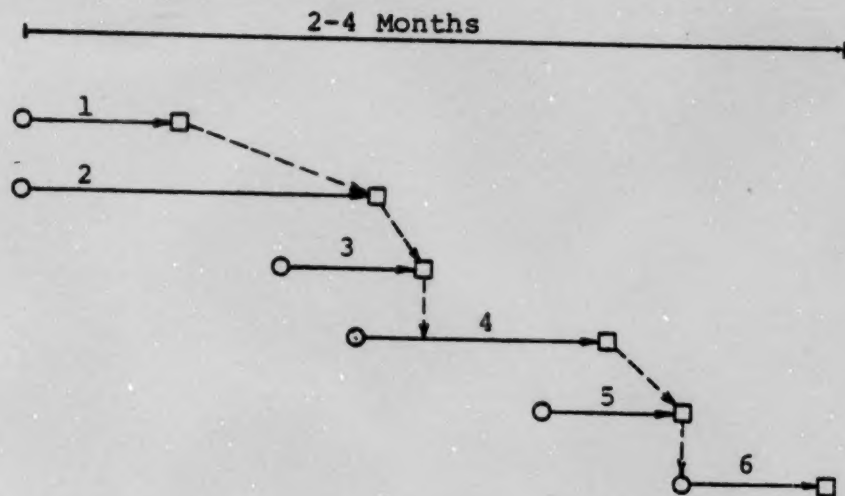
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NON-INTERACTIVE REVIEW PROCESS

NON-INTERACTIVE REVIEW PROCESS (WITH TWO REVIEWS)

LEGEND: ○ START POINT — ACTIVITY □ OUTCOME - - - - - CONSTRAINT



Steps:

1. Select Respondents
2. Develop and Send the Review Form
3. Analyze Responses
4. Develop and Send the Second Review Form
5. Analyze Responses to the Second Review Form
6. Summarize Results

OVERVIEW

The utilization of the non-interactive approach to reviewing objectives achieves an aggregated group opinion while minimizing the inherent difficulties in a face-to-face meeting. Responses are solicited and feedback is provided to respondents by sequential mailed review forms. As few as one or as many as three rounds of questioning and analyses may be involved dependent upon the extent of consensus desired and the amount of input to be obtained. The initial review form consists of a list of preliminary objectives and the goals from which they were derived. The responses obtained from the first review form are summarized and serve as the basis for the content of the second review form. Participants are requested to respond to each form by reviewing the list of objectives and associated goals, adding or deleting any objectives, requesting clarification and providing comments. This process continues until the desired information or degree of consensus is obtained.

KEY CONSIDERATIONS

The major expense of the non-interactive approach is staff time which increases with the number of respondents and the amount of information desired. Additional costs include postage, long distance telephone service and form reproduction.	COST
Two staff members knowledgeable of the State vocational education delivery system and the needs of the populations targeted by the review process should be available on a part-time basis to assist in the development of the review forms and the analyses of the responses. Limited clerical and secretarial involvement are also required.	STAFF
The non-interactive approach requires two to four months to complete dependent on the number of respondents, the number of rounds of questioning and the length of the review form.	TIME

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No unique facilities or equipment are required to implement the non-interactive approach unless the size of the respondent pool necessitates computer analysis of responses.	EQUIPMENT FACILITIES
Selected respondents must possess suitable qualifications for providing pertinent feedback on suggested objectives and exhibit an interest in participating in the process.	PARTICIPANTS
The non-interactive approach can be used to provide feedback on objectives for any target population by changing the list of suggested objectives and the sample of respondents. It is particularly suitable when it is difficult to assemble individuals in a group setting and/or where there is diverse opinion as to the suitability of various objectives for serving special populations. It is also useful in situations where personality conflicts or dominations inhibit the group process.	APPLICATIONS
Feedback provided by the non-interactive process serves to create an awareness and educate respondents as to the perceptions of colleagues and the concerns and intents of the State vocational education agency.	SIDE-EFFECTS

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IMPLEMENTATION STEPS

STEP 1

SELECT RESPONDENTS

The following groups should be considered when obtaining feedback on preliminary objectives

RESPONDENT GROUPS
• Other State agencies serving special populations • Local education agencies and other service providers • Consumer/advocacy groups • Advisory groups • General public • Labor organizations

It may be acceptable to omit some or all of the above groups from participation in the review process if input had been solicited from them in the formulation of the preliminary set of objectives.

A nomination procedure can be used to select respondents if State agencies wish to obtain feedback from persons knowledgeable of the needs of the target population. SVEA staff, particularly State coordinators and consultants for the special populations, can identify appropriate groups or individuals to be represented on the respondent panels.

STEP 2**DEVELOP AND SEND THE REVIEW FORM**

The review form consists of the list of goals and the objectives that were formulated for the attainment of each goal. Supplemental information, such as identified needs or rationales, should be provided if available. The review form instructions indicate that respondents are to

- suggest additions or deletions,
- request clarification on unclear objectives and
- make comments where applicable

Included with the initial review form is a cover letter explaining the purpose in sending the form and how the responses will be utilized; a stamped, return-addressed envelope; and the response date.

STEP 3**ANALYZE RESPONSES**

The feedback obtained on the first review form is examined and similar suggestions or comments are combined. For each subset of responses, a summary statement is written which encompasses the related ideas in the subset.

STEP 4**DEVELOP AND SEND THE SECOND REVIEW FORM**

The second review form consists of the list of preliminary objectives and the summarized feedback that is obtained from the first form. Respondents are instructed to review the preliminary list of objectives in light of the additional information and again provide their comments and suggestions.

STEP 5**ANALYZE RESPONSES TO THE SECOND REVIEW FORM**

The same procedures are followed for this analysis as were outlined in Step 3. The responses of the first and second review form are combined. An indication of their commitment to achieving the objectives is the extent of agreement among the respondents. Comments provided throughout the process may illuminate some of the difficulties and benefits associated with the attainment of suggested objectives.

STEP 6**SUMMARIZE RESULTS**

The final results of the review process obtained in Step 5 serve as input in the finalization and revision of the suggested objectives for the special population under consideration. These results should be summarized in a report in order to make the feedback more readily accessible to special needs planners.

FOR ADDITIONAL INFORMATION

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Group Techniques for Program Planning: A Guide to
Nominal Group and Delphi Processes. Glenview, IL:
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SECTION 3

DISSEMINATION OF OBJECTIVES

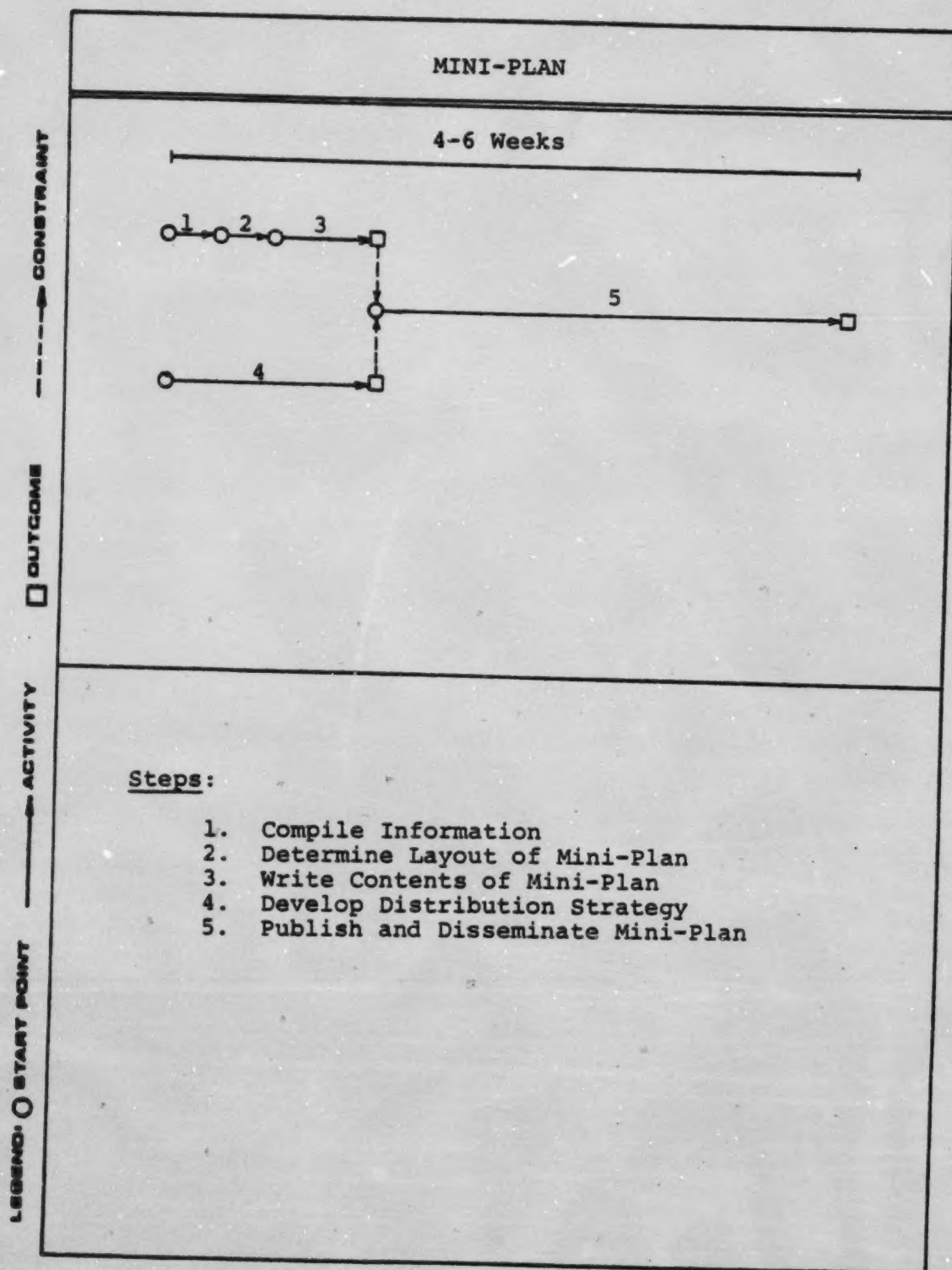
DISSEMINATION OF OBJECTIVES

The final activity of the development of statewide objectives for the delivery of vocational education and support services to special populations is their dissemination to a wide audience. Apart from dissemination through distribution of the State plan to various public and private sources, public availability of statewide objectives for special populations can be increased through three approaches presented in this chapter. Mini-plans are a means of widely disseminating a synopsis of State vocational education agency objectives and the goals from which they were derived in a format more readable and less expensive to produce than a complete State plan. The second dissemination approach, a one-page flyer, accomplishes a similar purpose on a simpler scale. The flyer consists of the objectives and their associated goals that have been formulated by the State vocational education agency. The final approach to dissemination presented in this chapter is the dispersion of information on statewide objectives for special populations through scheduled agency activities. This involves a brief presentation of the objectives and the goals from which they were derived during such activities as training workshops, inter-agency conferences, and meetings of advisory councils.

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MINI-PLAN

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OVERVIEW

The mini-plan provides an effective means for disseminating key information from the five-year State plan. It is more cost-effective than dissemination of the entire plan and thus allows for circulation on a broader basis.

There are three basic components in the development of the mini-plan: determining the content, designing a layout and format, and formulating a distribution plan. Typically, content of the mini-plan includes the statewide objectives and their associated goals, actual and projected enrollment figures in vocational programs, funding figures, geographic distribution of existing vocational facilities and new programs being funded or facilities under construction. Layout design involves determining the most effective way to present the material. Decisions need to be made on what information is to be presented as text, what will be organized into graphs, tables and charts, and how to lay out the material to achieve the greatest visual effectiveness. In developing the distribution plan, State vocational education agency staff must decide how to disseminate the mini-plan and to whom. Upon completion of these three steps the mini-plan is printed and disseminated to the designated agencies, organizations and individuals.

KEY CONSIDERATIONS

The cost of disseminating the mini-plan is much less than for dissemination of the entire five-year or annual plan. Expenses include staff time, printing costs, mailing costs and possibly graphic design costs.	COST
The mini-plan requires at least one staff member for its development, with the possible addition of a graphic consultant. Necessary skills include writing and graphic design abilities.	STAFF
Time requirements for development are a minimum of two weeks. At least four weeks should be allowed for printing and dissemination of the mini-plan.	TIME

Development of the mini-plan requires access to graphic materials and printing facilities.	EQUIPMENT FACILITIES
Not applicable to this procedure.	PARTICIPANTS
The mini-plan can be used to disseminate goals, objectives and other information for any target population. It is particularly suitable in cases where widespread dissemination of the entire plan is impractical.	APPLICATIONS
Besides serving as a dissemination tool, the mini-plan promotes public relations between the State vocational education agency and outside agencies, groups and the general public.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

COMPILE INFORMATION

Content is the first consideration in developing a mini-plan. Decisions must be made on the most appropriate information for inclusion in the plan, then the necessary material compiled. Typically, the mini-plan represents a synopsis of the information contained within the five-year plan. Therefore, key information pertaining to the targeted special needs population can be summarized and used as the basis for the mini-plan.

The following are recommendations for the types of information to be considered for the inclusion in the mini-plan:

CONTENTS OF MINI-PLAN

- Statewide objectives for the target population and the goals from which they were derived--it may be advantageous to include related information, such as rationales, assessment information, national issues and historical trends in serving special populations.
- Actual and projected enrollment figures by instructional areas over a five-year period.
- Funding information--this might include a description of how funds are requested and allocated, actual or projected funding figures for the five-year period, and a general breakdown of the distribution of funds by purposes.
- Geographic distribution of existing facilities and new facilities planned or under construction.
- The types of programs currently being funded and new programs to receive funding.
- A list of key personnel to contact within the State agency for more information or assistance--these might include area consultants, special needs consultants, sex-equity coordinators, etc.

STEP 2**DETERMINE LAYOUT OF MINI-PLAN**

At this point it may be worthwhile to consult a graphic designer or printer on the most visually effective format for organizing the information compiled during Step 1. Decisions must be made on whether to present the various types of information as text or in tables, graphs or figures. Enrollment and funding figures are usually most effectively presented in tables and graphs. In fact, for greater readability and to maintain reader interest, it is advisable that text be used sparingly and only where background information or clarification is necessary. For instance, the statewide goals and their associated objectives may be presented in table format followed by a narrative containing the rationale for their selection.

STEP 3**WRITE CONTENTS OF MINI-PLAN**

The text is written and the tables and figures are drawn to conform to the designated format. Again, it may be worthwhile to solicit the assistance of a person with experience in graphic arts for the design of the tables and graphs.

STEP 4**DEVELOP DISTRIBUTION STRATEGY**

The State agency needs to make decisions on how and to whom the mini-plan will be disseminated. The dissemination plan depends in part on available funds and the range of the audience to be reached.

The following is a list of agencies, organizations or institutions that can be utilized as possible centers of dissemination:

POSSIBLE DISSEMINATION CENTERS

1. Local education agencies
 - P.T.A.'s
 - School libraries
2. Education information centers
3. Libraries
 - Public libraries
 - Community college and university libraries
4. Chambers of commerce
5. Employment Service Offices

In addition to the above suggestions, there are a number of key agencies and groups within the State to which SVEAs might want to send mini-plans directly.

TARGET AGENCIES AND GROUPS FOR MINI-PLAN

- State and Local advisory councils
- Local boards of education
- Other State agencies involved in the delivery of services to the target populations
- Special population advocacy groups
- Associations representing business and industry
- Labor unions
- Work education councils
- Career education advisory councils
- Prime sponsors planning councils
- Community-based organizations
- Other social and community groups

STEP 5 PRINT AND DISSEMINATE MINI-PLAN

The final step in the dissemination plan is to have the appropriate number of copies of the mini-plan printed and then sent to the designated agencies and organizations.

SAMPLE MODIFICATIONS

There is no standard format for the contents of a mini-plan. Therefore, it can be modified in any way which best suits the purposes and budget of the State vocational education agency.

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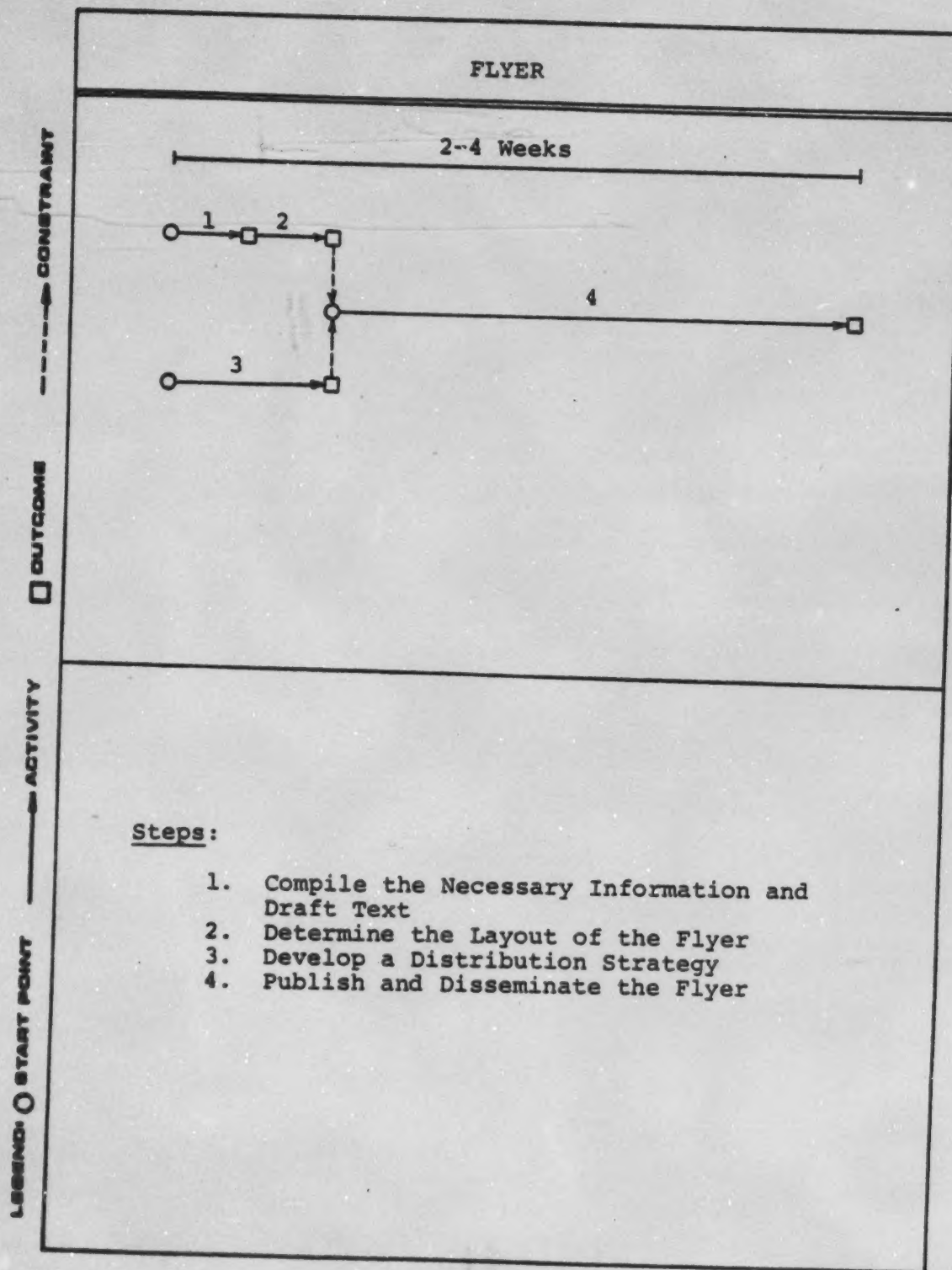
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FLYER



OVERVIEW

The flyer provides a relatively cost-effective means of disseminating information on vocational education goals and objectives for special populations. The flyer consists of a one-page document which highlights the goals and their associated objectives that have been formulated by the State vocational education agency. There are two major tasks in developing a flyer: designing a format and planning the distribution strategy. The format design relates to the way in which the material is presented (in text or table form) and the physical layout of the material. The distribution strategy determines how and to whom the flyers will be circulated. Once the tasks are completed, the flyers are printed or duplicated and disseminated.

KEY CONSIDERATIONS

The cost in disseminating a flyer is less than for dissemination of the entire five-year plan, annual plan or mini-plan. Expenses include staff time, printing costs, mailing costs and possibly graphic design costs.	COST
The flyer requires at least one staff member for its development, with the possible addition of a graphic consultant. Necessary skills include writing and graphic design ability.	STAFF
Time requirements for development are a minimum of 1 day. At least 2-3 weeks should be allowed for printing or duplication and dissemination of the flyer.	TIME

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Development of the flyer requires access to graphic materials and printing or duplicating facilities.	EQUIPMENT FACILITIES
Not applicable to this procedure.	PARTICIPANTS
The flyer can be used to disseminate information on objectives and their associated goals for any target population. It is particularly suitable in cases where dissemination of the entire plan or mini-plan is impractical.	APPLICATIONS
Besides serving as a dissemination tool, the flyer promotes public relations between the SVEA and outside agencies, groups and the general public.	SIDE-EFFECTS

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IMPLEMENTATION STEPS

STEP 1

COMPILE THE NECESSARY INFORMATION AND DRAFT TEXT

The basic information to be presented in the flyer consists of the statewide objectives that have been developed by the SVEA and the goals from which they were derived. Related information such as rationales, assessment information, and national issues may also be included.

STEP 2

DETERMINE THE LAYOUT OF THE FLYER

In determining the layout, consideration must be given to the most effective method of presenting the material within budget limitations. For greater readability and to maintain reader interest, it is advisable that large amounts of straight text be avoided. Those persons responsible for the development of the flyer may wish to consult a graphic designer on the visual display. Once the layout has been determined, the flyer can be developed.

STEP 3

DEVELOP A DISTRIBUTION STRATEGY

The dissemination plan, i.e., how and to whom the flyer will be disseminated, depends in part on budget limitations and the range of audience to be reached. The following are suggestions of ways to achieve broad circulation to school personnel and the general public:

DISTRIBUTION STRATEGIES

- Send to community colleges and technical institutes for distribution to staff and students.
- Send to local education agencies for further distribution to school personnel, school libraries and/or P.T.A.'s.
- Send to public libraries and State university libraries for further distribution to the public.
- Send to chambers of commerce within the State for further distribution to the general public.
- Send to education information centers for further distribution to citizens that contact the centers.
- Send to local employment services offices for distribution to ESC clients.

In addition to the above suggestions, there are a number of key agencies and groups within the State to which SVEAs might want to send flyers directly.

TARGETED AGENCIES AND GROUPS FOR THE FLYER

- State and Local vocational education advisory councils
- State and Local boards of education
- Other State agencies involved in the delivery of services to the target population
- State vocational association
- Special population advocacy groups
- Associations representing business and industry
- Work education councils
- Career education advisory councils
- Prime sponsors planning councils
- Other social and community groups

STEP 4 PUBLISH AND DISSEMINATE FLYER

The final step in the dissemination process is to have the appropriate number of copies of the flyer printed or duplicated in a form suitable to the means of dissemination (e.g., as a self-mailing flyer or a single sheet). The flyers are then sent to the designated agencies and organizations.

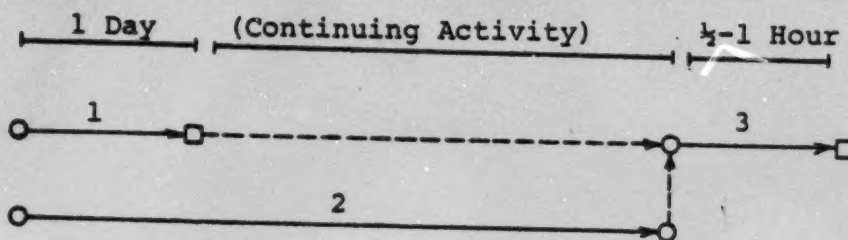
SAMPLE MODIFICATIONS

There is no standard format for the flyer. The contents, length and format can be modified in any way which best suits the purposes and budget of the State vocational education agency. The flyer can also be used in conjunction with the mini-plan to achieve wide dissemination. The mini-plan can be distributed to agencies or special interest groups, and the flyer can be distributed to individuals by bulk mailing copies of it to Local education agencies, community colleges and technical institutes, local employment service offices and other possible dissemination centers.

**DISSEMINATION THROUGH SCHEDULED
AGENCY ACTIVITIES**

DISSEMINATION THROUGH SCHEDULED AGENCY ACTIVITIES

LEGEND: ○ START POINT — ACTIVITY —> OUTCOME □ CONSTRAINT



Steps:

1. Prepare a Presentation
2. Identify Appropriate Activities for Dissemination
3. Make Presentation

OVERVIEW

Possible vehicles of dissemination for statewide objectives for special populations and the goals from which they were derived are the normally scheduled activities of State vocational education agency staff, such as training workshops, interagency conferences, and meetings with advisory councils. Used alone this technique does not satisfy the need for community awareness of the direction in which the State vocational education agency is moving in serving special populations. However, it can be used in conjunction with other techniques such as the flyer or mini-plan to achieve a more comprehensive distribution of the statewide objectives and their associated goals.

A brief presentation is prepared for use by the state vocational education agency staff member involved in the scheduled activity. The presentation can include goals and objectives that have been set for the target population and other pertinent information such as rationales for their selection. SVEA staff may wish to cover enrollment and funding figures in the presentation also.

KEY CONSIDERATIONS

The cost of dissemination through agency activities is minimal. Staff time in preparing and delivering the presentation and possibly some travel are the only expenses.	COST
One staff member is required for preparing and delivering the presentations.	STAFF
Time involved would be a day for preparation and whatever time is required for the presentation. The calendar time required for dissemination would vary depending upon the schedule of agency activities.	TIME

No equipment or facilities are required.	EQUIPMENT FACILITIES
Not applicable to this procedure.	PARTICIPANTS
This means of dissemination can be used for any special population. It is most suitable when budget constraints limit dissemination activities.	APPLICATIONS
Because dissemination activities have to be coordinated with other scheduled activities, the calendar time involved may be extensive. Personal interaction during the dissemination and the question and answer period can serve to promote public relations between the SVEA and the individuals or agencies attending the presentation.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

PREPARE A PRESENTATION

A brief presentation of the statewide objectives that have been developed for the target population and the goals from which they were derived is prepared. It should include related information such as rationales, assessment information and national issues. Actual and projected enrollment figures, funding information and current and new projects can also be covered.

STEP 2

IDENTIFY APPROPRIATE ACTIVITIES FOR DISSEMINATION

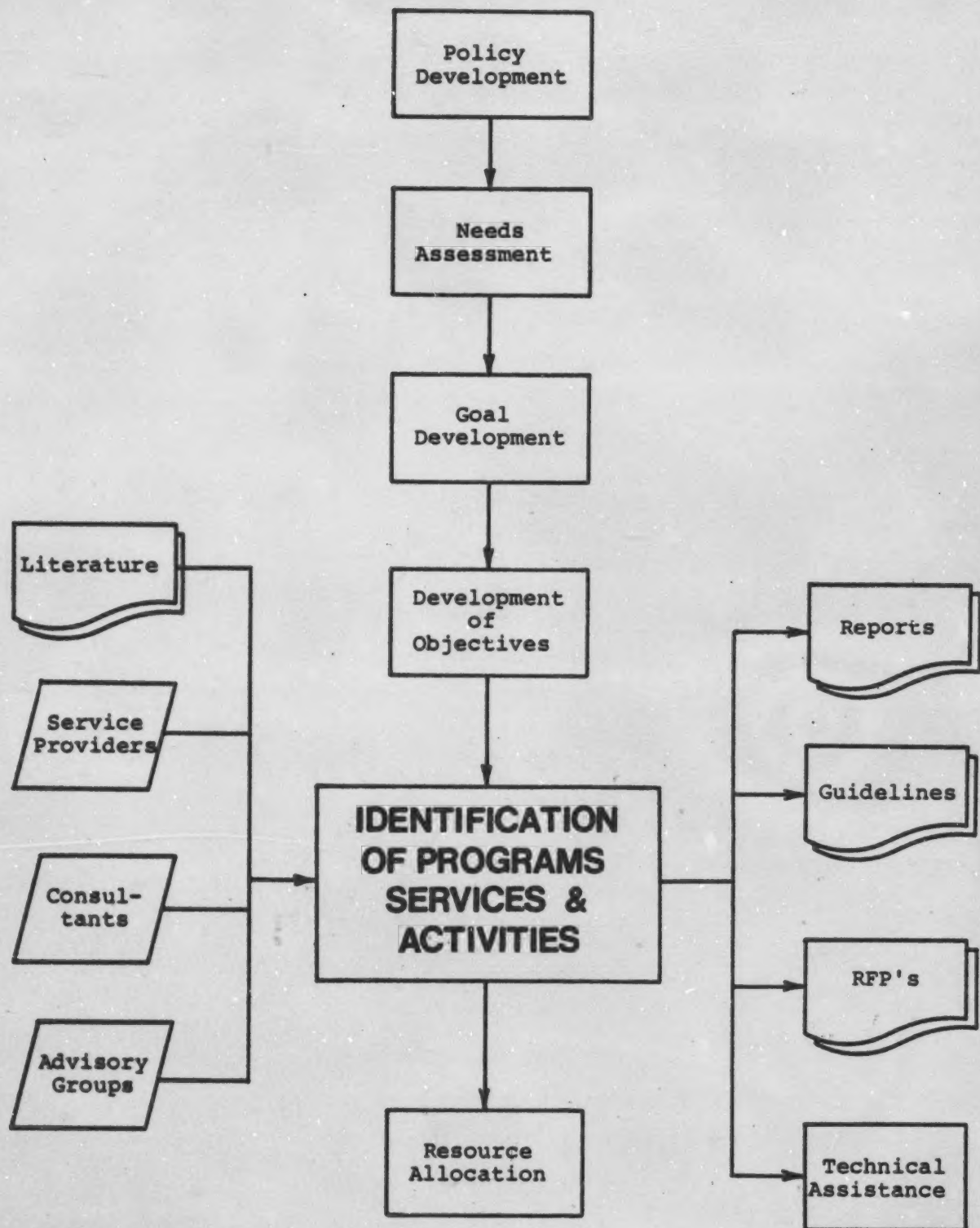
The schedule of State vocational education agency activities should be examined periodically to identify all situations appropriate for making the presentation. Examples of these activities are training workshops, inter-agency conferences and meetings with advisory councils. Other opportune times for the presentation may include field visits by the special needs consultants and sex equity coordinators. The presentations should be scheduled well in advance of the date of the meeting.

STEP 3

MAKE PRESENTATION

A State vocational education agency staff member involved in the activity should be identified to make the presentation. The presentation should be given with a question and answer period following.

CHAPTER SEVEN



IDENTIFICATION OF PROGRAMS, SERVICES AND ACTIVITIES

This chapter of the Vocational E.S.P. Planning System contains alternative procedures which States can use in the identification of programs, services and activities to best achieve objectives targeted at special populations. Objectives targeted at special populations are likely to represent new challenges to State and local agencies. Because the challenges are new, strategies necessary for their attainment will rarely be obvious. Identification of such strategies thus is a necessary component of the planning system. This component consists of a single key activity:

<u>Key Activity</u>	<u>Page</u>
1. Alternative programs, services and activities are identified and compared relative to their potential for attaining stated objectives.	7

When identifying activities for serving special populations there are a number of characteristics which will enhance any of the procedures presented in this chapter. To the extent possible, these characteristics of the actual identification process and the resultant products should be taken into account in implementing a procedure.

Characteristics of the Process

1. Programs, services and activities are identified with the cooperation of other agencies such as:
 - Secondary/post-secondary State vocational education agencies
 - Vocational Rehabilitation
 - Corrections
 - Special Education
 - Local vocational education agencies or institutions
 - CETA prime sponsors
 - Labor organizations
2. The procedure used to identify potential programs, services and activities for serving special populations takes into consideration such factors as:
 - Relative costs of alternatives
 - Evidence of previous effectiveness
 - Availability of similar programs, services or activities through other delivery systems
3. Responsibility for the delivery of programs, services and activities is allocated to educational levels and types of institutions on the basis of such factors as:
 - Characteristics of the target populations to be served
 - Comparative costs
 - Availability of necessary facilities, personnel and supportive resources to ensure desired results
 - Extent to which institutional goals, objectives and activities are consistent with those which the State has identified and intended for special populations

Characteristics of Products

1. Programs, services and activities which are intended to assist special populations are detailed for each objective.
2. The programs, services and activities associated with each objective appear necessary and sufficient for attaining the objective.

SECTION 1

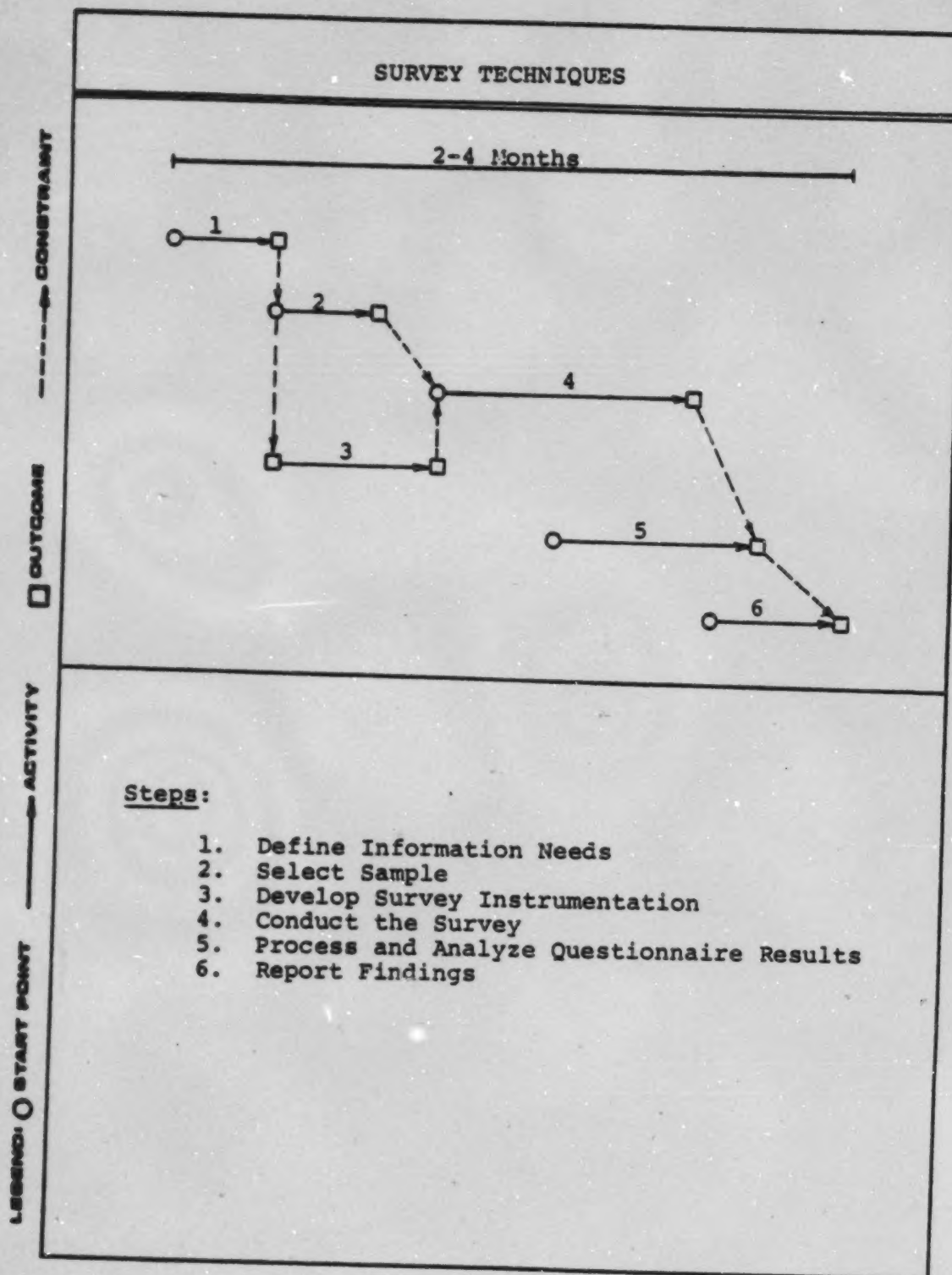
IDENTIFICATION OF ACTIVITIES

IDENTIFICATION OF ACTIVITIES

Presented within this section are four alternative procedures which States can use to identify programs, services and activities for providing vocational education to special populations. The first alternative describes survey techniques as they can be applied in eliciting perceptions of effective strategies for serving special populations. The Delphi Technique, which is a quasi-survey approach, is presented as the second alternative. It is an iterative process of soliciting responses and providing feedback to respondents until a majority or consensus opinion is established. The third alternative presented, a literature search, can represent a cost-effective means of identifying activities, provided ample documentation in the area of interest exists. An informal method of selecting from among the identified activities is also provided within this description. The fourth alternative presented is the Nominal Group Technique. This procedure is a systematic means of soliciting individual responses and aggregating group judgments through mathematical rating or ranking.

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SURVEY TECHNIQUES



OVERVIEW

A number of different survey approaches can be utilized to identify potentially successful activities for serving special populations. Planning for the implementation of a survey procedure involves defining the information needs of the State agency, selecting a sample of respondents and developing the survey instrumentation. Pre-tested survey instruments are then either mailed to respondents, or telephone or personal interviews can be conducted to collect information. The results of the survey, i.e., activities for serving special populations, are determined through either computerized or hand analyses of the completed questionnaires. Dependent on the type of scaling and item format selected, the survey approach is also capable of prioritizing identified State and/or local activities. The results are then summarized in report form to serve as a basis for State agency programmatic decisions, to provide feedback to respondents, and to broaden the research base of knowledge regarding the delivery of vocational education to special populations.

KEY CONSIDERATIONS

Considerable expenses are involved in implementing a survey approach, though these vary dependent on such factors as the sample size, volume of data collected, and method of data collection. A major expense is professional staff time, which is extensive during the planning stages of the survey, questionnaire development and the analysis and reporting of results. If an interview method is used there are also expenses for training interviewers and travel or telephone costs. Other costs include questionnaire reproduction, postage, clerical staff time and computer time (optional).	COST
Utilization of a survey procedure requires one half-time staff member trained in survey techniques and data analysis, preferably assigned to manage the project. Temporary full-time interviewers may be required if an interview approach is used. Additional professional staff may be involved in questionnaire design. Secretarial and clerical involvement is required in preparing the questionnaire, mailing out and recording returns, and assisting in the analysis and reporting of results.	STAFF
A survey approach will generally require considerable time to implement. At least two weeks should be allowed for preparatory tasks, and, dependent on the format and length of the questionnaire, instrument development requires an additional two to four weeks. The time needed to conduct the survey varies dependent upon the data collection method used and the size and composition of the sample, but will generally range from two weeks to two months. Data analysis and reporting of results require an additional two to four weeks. Thus the time required to complete a survey procedure ranges from two to four and one-half months, though the time parameters can be increased or decreased somewhat by changing the level of staff effort on the project.	TIME

Access to computer facilities facilitates the analysis of survey data. If a telephone interview approach is utilized telephones must be provided for each of the interviewers (with WATS lines, if cost-effective).	EQUIPMENT FACILITIES
The selected sample of respondents should adequately represent the population from which it was drawn. Thus, one of a number of alternative sampling techniques must be employed. The success of the procedure requires that the respondents are knowledgeable in the area targeted by the survey.	PARTICIPANTS
The survey technique can be used to identify activities for serving any target population by modifying the composition of the sample and the instrumentation. It is particularly useful for gathering diverse perceptions as to what constitutes effective activities for serving special populations and for prioritizing potential activities. The survey approach should not be used if there is insufficient expertise in the field from which to draw a sample. It is also difficult to employ when targeting more than one special population unless a large sample and lengthy survey instrument are utilized.	APPLICATIONS
The survey process provides for diverse, non-SEA input into activity identification. However, when lacking respondent commitment, the procedure may cause resentment on the part of respondents because of the amount of time they must invest in the survey process.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

DEFINE INFORMATION NEEDS

The first step in utilizing a survey technique is to outline the type or types of information which are needed to identify alternative programs, services or activities. Direction for this step is provided by the objectives developed in the previous planning stage. However, it is important that decision makers clarify what information would be necessary to select activities to achieve these objectives and how the information will be used. For example, an objective targeted to limited English-speaking individuals might read:

By September 1, 1980, each Local education agency shall provide the support services necessary for persons with limited English-speaking abilities to complete vocational education programs.

In order to achieve this objective, information is needed on the types of support services which are perceived to be the most effective in serving individuals with different primary languages. Additionally, information is needed as to what types of activities the State agency could initiate to encourage or facilitate the implementation of identified support services at the local level.

In defining information needs, consideration should be given to all objectives of the State agency. In some instances multiple objectives may have the same or similar information needs. Thus, duplication of effort can be eliminated by simultaneously collecting information on different objectives with similar data requirements.

The process of defining information needs should include all those individuals who will make use of collected data, e.g., planners, administrators, coordinators of services to special populations, or representatives of other State agencies. The process will then provide direction to the implementation of the procedural steps which follow.

STEP 2**SELECT SAMPLE**

In selecting a sample to survey individuals' perceptions of effective strategies for serving special populations there are three major considerations with which the State agency must contend. These are:

- defining the population to be sampled;
- determining the size of the sample; and
- selecting a sampling methodology.

Defining the population to be sampled is essentially answering the question:

Whose input is desired in the activity
identification process?

The population could consist of secondary and/or post-secondary educators, or it could include a subset of educators, such as teachers, administrators or counselors. The SEA may wish to obtain input from students or go outside the sphere of vocational education and sample from employers, other service providers or special interest groups. Alternatively, the population could include more than one of these sources of input. Deciding whom to survey is influenced by a number of factors. A major factor is the information needs identified in the previous step. Dependent on the type of information desired, those considered most capable of providing that information will compose the population. Additionally, characteristics of the special population(s) targeted by the surveys and the assigned and potential responsibilities of alternative delivery systems should be taken into consideration when deciding whom to sample.

A second decision which the State agency must make in planning the survey is the number of individuals to include in the sample. The following characteristics of sampling theory provide some guidance in setting the sample size.

CHARACTERISTICS OF SAMPLING THEORY

- The accuracy of the information will increase as the sample size becomes larger. Too small a sample can under-represent the population and thus produce erroneous data. However, too large a sample can result in redundancy and greater precision than needed and thus produce an unnecessary increase in data collection costs.
- The more heterogeneous the population to be sampled the greater the sampling error, and thus the larger the sample should be. The population will generally become more heterogeneous as the number of objectives or types of special populations addressed by the survey is increased.
- Larger samples will be needed when the data are to be reported or analyzed by one or a combination of categories (e.g., by sex, race, age group, handicapping condition).

A third consideration in sampling is the type of sampling methodology to be used in selecting respondents. Sampling procedures fall within two typologies: probability and non-probability. The various types of probability sampling techniques (e.g., random sampling, cluster sampling, systematic selection, multi-stage sampling) choose individuals to be surveyed based on known probabilities of selection, thus enabling reliable generalization to the population being sampled. Non-probability sampling procedures, on the other hand, select individuals based on the convenience or discretion of the researcher. While such techniques are generally frowned upon by sampling theorists, difficulties in listing the population may preclude the use of probability models. For example, to employ a probability sampling procedure to select a sample of employers it would be necessary to list all the employers of the special population of interest (most likely stratified by size and/or type of firm) and select units from the population of employers. Alternatively, the State, with the cooperation of local agency personnel, could judgmentally select those employers whom it deemed representative of the population of interest. If the purpose of the survey is to obtain information from exemplary programs, the nomination procedure is an effective non-probability sampling technique. Using this technique the State agency requests nominations from knowledgeable individuals (e.g., advocacy groups, regional administrators, personnel from other State agencies) of programs which meet pre-set criteria defining quality delivery systems. Those programs nominated are then screened based on the criteria, and the screened programs compose the sample.

As an in-depth analysis of the relative advantages and disadvantages of alternative sampling procedures is beyond the scope of this report, the reader is referred to the following sources for further information: Babbie, 1973; Warwick & Lininger, 1975; Kish, 1965.

STEP 3

DEVELOP SURVEY INSTRUMENTATION

The third step in conducting a survey, developing the instrumentation, involves six substeps.

STEPS IN DEVELOPING SURVEY INSTRUMENTATION

1. Determine the data collection method.
2. Develop an analysis plan.
3. Develop the questionnaire items and scaling.
4. Write accompanying instructions.
5. Pretest the instrument.
6. Finalize the questionnaire.

The first two substeps are necessary in that they affect both the structure and the content of the instrumentation. If a mail-out procedure is selected the questionnaire must be comprehensive and self-explanatory. Telephone or personal interview procedures, on the other hand, allow a trained interviewer to clarify questions or probe for additional information. The types and methods of analyses to be performed should also be decided prior to item development in order that data suitable to the analysis design are collected. These components are discussed in further detail in Step 4 and Step 5.

Questionnaire items should be developed to address the information needs identified in Step 1. Items may target such subjects as the relative cost or effectiveness of various activities, trends in service delivery, perceptions of barriers and effective strategies to overcome the barriers, coordination with other service deliverers, or local vs. State activities. There are two general forms that the items may take: open-ended or closed-ended. Closed-ended or structured items are advantageous in that it is easier and less time-consuming for respondents to complete the items than open-ended questions. What is expected of the respondents is often clearer using a structured format. Also, it is easier to tabulate and analyze the responses to this type of survey form. However, of prime consideration to surveys used to identify activities for serving special populations is the fact that closed-ended questions define the range of input that can be obtained. Specifying the allowable responses to the items during questionnaire development requires considerable background research and frequently inhibits the identification of innovative service approaches by respondents. However, use of a rating or ranking scaling methodology with a

closed-ended format allows for an efficient prioritization of the identified activities. An alternative approach, which capitalizes on the advantages of both formats is to employ an open-ended questionnaire with a subset of respondents. The activities identified by this survey can be categorized and form the basis for a structured instrument which can subsequently be used to survey a larger sample.

Other steps involved in the development of the draft questionnaire are integrating the items into an appropriate format and writing accompanying instructions for responding. The ordering of items should be such as to allow a smooth flow to the questionnaire, with transitional statements given in conversational form accompanying any shifts in content emphasis. Instructions must be clear, concise and provide respondents with some background for the purpose of the survey and how the results will be used. Any terms describing special populations or vocational education delivery systems should be defined in order that respondents have a similar frame of reference for responding.

A pretest of the instrumentation is necessary to determine whether it is capable of eliciting the desired information from respondents. The pretest may be accomplished with as few as 15 respondents, but these should be as similar to the population surveyed as possible. If the instrument, as evidenced by the results of the pretest, is not producing the desired results, a number of potential problems in the survey design should be investigated. First of all, the instrument should be evaluated for item clarity and questionnaire format. Trends in pretest responses will reveal any items which are difficult to understand or which cannot be responded to. Likewise, trends will indicate problems with instructions or sequencing of the items. A second problem which may be uncovered through the pretest is an inadequacy in the population being sampled. If the respondents are found to be unable to identify activities for serving special populations it may be necessary to select a different type of respondent or resort to an alternative procedure for identifying activities.

Results of the pretest will generally flag items which should be rewritten or reordered prior to the actual survey. The length of time for administration or completion of the instrument will also be gauged from the pretest. When State agency staff are satisfied with the revised instrumentation (either through a self evaluation or an additional pretest) they may proceed with the next steps in the survey process.

STEP 4**CONDUCT THE SURVEY**

Dependent on the method of data collection selected (mail-out, telephone interview, personal interview), the means by which the survey is conducted will vary. The following considerations should be taken into account when selecting a data collection method and conducting the survey.

The mail-out method is generally the least expensive approach. The mail-out also allows the respondent to complete the questionnaire at his/her leisure more so than the telephone or in-person approach. The following points are important to remember in considering the mail-out method for administration:

MAIL-OUT METHOD: KEY POINTS

- Dependent on the characteristics of the sample, the reading level of the instrument may be crucial.
- Instructions must be in sufficient detail to indicate who should complete the questionnaire and how.
- If there is not a high degree of interest and commitment on the part of respondents the return rate will be low.
- If automatic data processing is to be used, the information will need to be checked and coded before data entry.
- A postcard follow-up or a reminder with an additional copy of the questionnaire is necessary for the optimal return rate.
- Postage should be provided to respondents for the return of questionnaires.

The telephone survey generally costs more than the mail-out method in that interviewers must be trained and perhaps hired to administer the instrument, long distance calls are generally necessary, telephone numbers must be looked up, etc. A major advantage of the telephone approach is the person-to-person contact offered. Other considerations of the approach include the following.

TELEPHONE APPROACH: KEY POINTS

- The types of individuals included in the sample may be difficult to reach by telephone.
- The length of time that a respondent can be kept on the telephone is limited--plan on absolutely no more than 40 minutes per interview.
- The method is usually more compatible with automatic data processing than the mail-out form.
- The volume of questions is not as important as the length of time involved.
- The person-to-person contact can allow better comprehension of the items through explanation by the interviewer and gives the interviewer a chance to probe for further information.
- The return rate will probably be no better than 65 percent.

The in-person method is usually the most expensive of the three methods in that it involves travel on the part of interviewers. Aside from that the considerations for this technique are similar to those for the telephone approach. A distinct disadvantage of the method can be, depending on the population surveyed, the environment into which the interviewer must be sent.

STEP 5

PROCESS AND ANALYZE QUESTIONNAIRE RESULTS

Preparation for the processing and analyses of the obtained data can begin as soon as the final form of the questionnaire is devised. The decision as to how to process the data and the congruence of items with information needs will have been accomplished in Step 3, so that proper editing procedures and analyses plans can be established. The processing of the data should include, at a minimum, the following substeps:

1. Screen the questionnaire for completeness. Depending on the method of administration used, this can be accomplished during the interviewing. The agency may be forced to establish minimum completeness criteria for the inclusion of a questionnaire or item in the final data base.
2. "Nonsense" responses (e.g., out of range response, non-conformance to skip patterns) should be screened out and reconciled before additional processing.
3. In general, make sure that all questionnaires in the data set have logical responses to all items.
4. In the case of open-ended items, a code scheme usually should be built if the data are to be automatically processed. If not, such items can usually be processed directly without resorting to a code, unless a numerical algorithm is involved.

5. If automatic data processing is used, it is wise to perform a random check of about 10 percent of the computer records against the questionnaires themselves. If data entry errors manifest themselves in this process, the agency may wish to check more data records against the questionnaires.
6. If automatic data processing is utilized, make sure that each questionnaire has a unique identification number so that it can be checked against its computer record.
7. In as much detail as possible, account for the sample surveyed in terms of, for example, the number of potential respondents who refused to answer the questionnaire, the number who could not be located, the number returned incomplete, the number complete, etc. This can be valuable information to the reader as well as to the agency in the planning of subsequent surveys.

The analyses of the survey responses should be kept as simple as possible. It would be best to consult with someone who thoroughly understands data and statistical methodology prior to the analysis of the data if such a person is not, in fact, charged with the overall project. It is important that the data fit the analysis plan in such a way as to provide meaningful and valid results. It is also, of course, of importance that inferences about the population under study not be made from insufficient sample size; it would be best to plan for standard error and confidence interval calculations along with the actual results-oriented analyses. In utilizing the survey method to identify activities for serving special populations, summary statistics will generally be sufficient for reporting the results. For example, the analyses may be planned to yield the response frequencies for individual items, medians and ranges of ranks and/or ratings and any cross tabulations of items that are considered related. Such statistics provide a descriptive summary of the results of the survey and a means for selecting from among the activities. If objective cost and/or effectiveness data are available, more sophisticated analyses, e.g., multiple regression or other multivariate analyses, could be utilized for predicting the success of various combinations of activities.

Many of the analyses to be used are planned before the actual conduct of the survey; however, in most survey research some unanticipated results occur. Thus, it is important that the analysis plan remain flexible throughout the data analysis process, and imaginative enough to account for unexpected relationships.

STEP 6

REPORT RESULTS

The results of the survey should be summarized in a report which can serve as a basis for decision makers in planning activities for delivering vocational education to special populations. As documentation of the survey, the report should also include a description of the methodology, a discussion, and conclusions and recommendations.

SAMPLE MODIFICATIONS

In planning the survey there are a number of decision points which represent modifications of any one survey approach. As they are essential to the conduct of the survey procedure the modifications have been described and compared in the steps outlined above. The points where the process can be modified are:

- the population surveyed;
- the sample selection procedure;
- the format of the questionnaire items;
- the method of data collection.

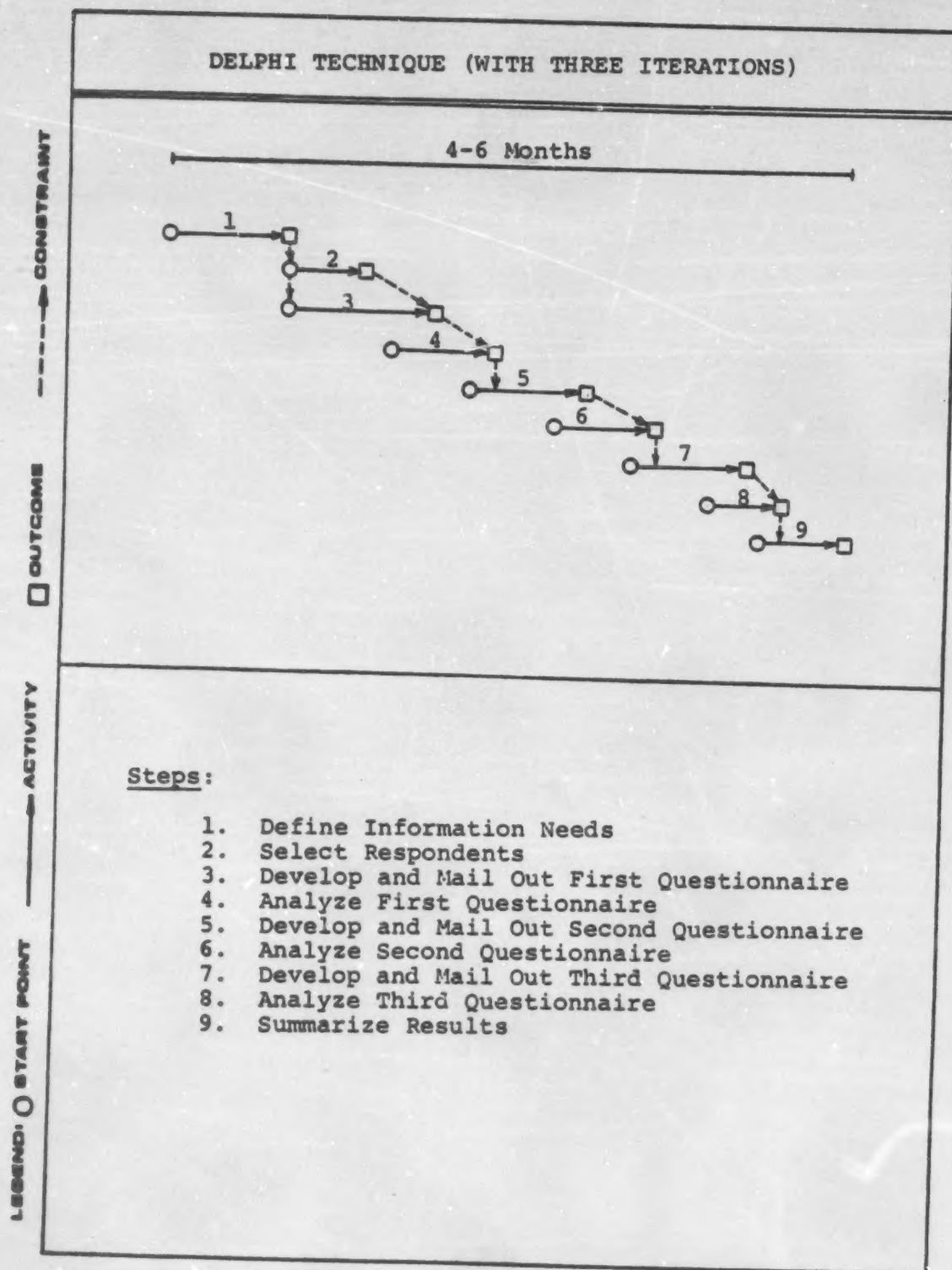
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DELPHI TECHNIQUE

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OVERVIEW

The Delphi Technique is a means of obtaining input regarding activities for serving special populations from a group of experts, without assembling the experts in a group setting. It is an iterative process of soliciting responses and providing feedback to respondents until a consensus or majority opinion as to the relative effectiveness of alternative activities is established. Dependent on the amount of information and the extent of consensus desired the Delphi can involve 2-5 rounds of questioning and analysis of responses. The first round consists of sending one or more questions, which address State agency objectives for serving special populations, to a representative sample of experts. The analysis and synthesis of the responses form the basis for items to be included in the second questionnaire. In the second round respondents are requested to review each of the activities (items; agree, disagree or ask for clarification on each of the activities; provide comments regarding any of the activities; add any additional activities; and rank the activities in order of importance. Feedback from the responses to the second questionnaire is then provided in the third round of the Delphi. This process continues until the desired information and degree of consensus are obtained; generally, three rounds are sufficient.

KEY CONSIDERATIONS

The Delphi is a relatively inexpensive technique to implement. The major expense is SEA staff time which increases with the number of respondents and the amount of information desired. Additional costs include questionnaire reproduction, postage, and long distance telephone service.	COST
The Delphi requires the intermittent involvement of one staff member with some background in research methods. Additionally, two staff members knowledgeable of the State vocational education delivery system and the needs of the populations targeted by the Delphi should be available on a half-time basis to assist as necessary throughout the Delphi project. Limited clerical and secretarial involvement are also required.	STAFF
The Delphi requires two to six months to complete dependent on the number of respondents, the number of rounds of questioning and the length of the questionnaires.	TIME

No unique facilities or equipment are required to implement the Delphi unless the size of the respondent pool necessitates computer analysis of responses.	EQUIPMENT FACILITIES
Selected respondents must possess suitable qualifications for answering the Delphi questions and exhibit an interest in participating in the process. This may require cooperation from LEAs, other State agencies, or outside groups and individuals, dependent upon the input desired.	PARTICIPANTS
The Delphi can be used to identify activities for serving any target population by simply changing the initial question(s) and the sample of respondents. It is particularly suitable when it is difficult to assemble individuals in a group setting and/or where there is diverse opinion as to the relative effectiveness of various mechanisms for serving special populations. It is also useful in situations where personality conflicts or dominations inhibit the group process.	APPLICATIONS
Feedback provided by the Delphi serves to create an awareness and educate respondents as to the perceptions of colleagues and the concerns and intents of the State agency.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

DEFINE INFORMATION NEEDS

The first step in utilizing the Delphi Technique is to outline the type or types of information which are needed to identify alternative programs, services or activities. Direction for this step is provided by the objectives developed in the previous planning stage. However, it is important that decision makers clarify what information would be necessary to select activities to achieve these objectives and how the information will be used. For example, an objective targeted to handicapped students might read:

By September 1, 1980, each Local education agency shall provide the necessary support services for all eligible individuals with exceptional needs (adapted from the California Five-Year State Plan, 1977, p. 3-35A).

In order to achieve this objective, information is needed on the types of support services which are perceived to be the most effective in serving individuals with various handicapping conditions. Additionally, information is needed as to what types of activities the State agency could initiate to encourage the implementation of identified support services at the local level.

In defining information needs, consideration should be given to all objectives of the State agency. In some instances multiple objectives may have the same or similar information needs. Thus, duplication of effort can be eliminated by simultaneously collecting information on different objectives with similar data requirements.

The process of defining information needs should include all those individuals who will make use of collected data, e.g., planners, administrators, coordinators of services to special populations, or representatives of other State agencies. The process will then provide direction to the implementation of the procedural steps which follow.

STEP 2**SELECT RESPONDENTS**

Delbecq, et al. (1975) suggest the following characteristics of respondents in a Delphi study.

CHARACTERISTICS OF RESPONDENTS

- Respondents feel personally involved in the problem of concern to the decision makers.
- Respondents have pertinent information to share.
- Respondents are motivated to include the Delphi task in their schedule of competing tasks.
- Respondents feel that the aggregation of judgments of a respondent panel will include information which they too value and to which they would not otherwise have access.

How and how many respondents are selected are dependent on the information needs identified in Step 1. Where decision makers desire information on innovative approaches for serving a target population a relatively small number (15-20) of experts could be selected through a nomination procedure. On the other hand, when information is desired on types of technical assistance which the State could offer to service providers, a representative sample of local administrators, teachers, counselors, etc. should be chosen as respondents. Additionally, representatives of other agencies, e.g., vocational rehabilitation, corrections, special education, CETA prime sponsors, should be included in the Delphi process.

Once the respondents are selected they should be contacted by telephone to request participation in the study. If an insufficient number agree to participate, further nominations or sampling may be required.

STEP 3

DEVELOP AND MAIL OUT FIRST QUESTIONNAIRE

This step can be conducted concurrently with Step 2. The first questionnaire in a Delphi study generally includes a cover letter and one or more general questions which are designed to satisfy the information needs identified in Step 1. Background information on the problem may also be provided.

The cover letter should convey the following (from Delbecq, et al., 1975).

- a thank-you to the respondent for participating;
- an explanation of why his or her help is important for identifying activities;
- a delineation of how the results of the Delphi will be applied to planning for special populations;
- instructions for responding; and
- a response date.

The initial Delphi question(s) follows directly from the information needs. For the example objective provided in Step 1, an appropriate Delphi question could be phrased:

What types of major barriers inhibit handicapped students from enrolling in and successfully completing vocational programs and being placed in related occupations? Please include the type of handicapping condition(s) which is affected by each of the identified barriers (orthopedically impaired, visually impaired, hearing impaired, mentally handicapped, etc.). For each barrier identified please list the modifications or support services which you perceive are most effective in overcoming the barrier. If possible, cite an example from your own experience in serving the handicapped of how the modification or service has been successful.

A form for responding, such as that portrayed in Figure 1, should also be included with the questions.

FIGURE 1

Sample Delphi Response Form

Barriers to Enrollment	Handicapping Condition	Potential Modifications/ Support Services	Example of Successful Service/ Modification
Barriers to Completion			
Barriers to Placement			

Prior to mailing the questionnaire to the respondents, it should be pilot tested on a small sample of individuals with similar characteristics as those who will participate in the actual Delphi. Any problems experienced by the test sample should be resolved and modifications of the cover letter and/or questions made. To assure continued interest on the part of the participants, the questionnaire packet should be mailed shortly after initial contact with the respondents. If the response rate is low, a follow-up letter or telephone call may be necessary.

STEP 4

ANALYZE FIRST QUESTIONNAIRE

The results of the first questionnaire form the basis for items included in the second questionnaire. Similar responses are collapsed and reworded to convey the intent of different respondents. This can be accomplished by placing each response on a 3x5 card and sorting the cards into stacks of similar responses for each question. Each stack is then labelled according to the commonalities among responses.

STEP 5

DEVELOP AND MAIL OUT SECOND QUESTIONNAIRE

The set of labels derived in Step 4 is transformed into easily understood statements which compose the items of the second questionnaire. This questionnaire should also be pilot tested before use. Respondents are requested to:

- review each of the items (barriers, activities, etc.);
- agree, disagree or ask for clarification on each of the items;
- add any additional items; and
- rank the items in order of importance.

Again, a follow-up may be necessary to obtain sufficient returns.

STEP 6**ANALYZE SECOND QUESTIONNAIRE**

Analysis of the second questionnaire involves four substeps.

STEPS IN ANALYZING QUESTIONNAIRE RESULTS

1. Tallying the responses to each item and calculating the percentage of respondents who agreed and disagreed with the item.
2. Calculating the median priority ranking and range of rankings for each item.
3. Summarizing the comments provided for each item.
4. Clarifying or eliminating items which were unclear to a large number of respondents.

At this point the State agency should evaluate the results to determine whether they are consistent with the information needs identified in Step 1. If the Delphi is not producing the needed information, modifications should be made prior to the development of questionnaire #3, e.g., stating the items in more general or specific terms.

STEP 7

DEVELOP AND MAIL OUT THIRD QUESTIONNAIRE

The third questionnaire consists of the item statements, the results of the second questionnaire (median and range of rankings and percent agreement), and a summary of comments for each item. Again, the respondents are requested to indicate whether they agree or disagree with an item and to assign a ranking as to the importance of the item. The comments provide participants with a frame of reference regarding the summary of responses and may serve to clarify the intent of the item.

STEP 8

ANALYZE THIRD QUESTIONNAIRE

The third questionnaire is analyzed in the same manner as the second. Any additional comments or reactions provided by the respondents are incorporated with those obtained in the second questionnaire. These final results are the basis for identifying successful activities for serving special populations. The extent of agreement with the items indicates the potential effectiveness which the activity may possess in enhancing the delivery of vocational education to special populations. The rankings indicate the relative effectiveness of the activities (e.g., for overcoming particular barriers) and thus provide a means for selecting from among the alternatives identified in the earlier questionnaires. Comments provided throughout the Delphi process provide more substance to the identified activities and may also illuminate some of the difficulties and benefits associated with alternative delivery approaches.

STEP 9**SUMMARIZE RESULTS**

The results of the Delphi process should be summarized in a report which can serve as a basis for decision makers in planning activities for delivering vocational education to special populations and as a vehicle for providing feedback to participants. Documentation of the study should include an introduction, a description of the methodology, a discussion and conclusions and recommendations.

SAMPLE MODIFICATIONS

The previous discussion has focused on a Delphi approach which utilized three rounds of questionnaires. Dependent on the information needs of planners more or fewer rounds could be employed. For example, if the major service strategies of interest are identified through a literature review or other means, the Delphi process could be initiated with the second questionnaire. In this case the Delphi would serve primarily as a means for selecting the most effective service strategies. On the other hand, if further consensus and clarification are desired, the Delphi team may wish to include a fourth or even fifth round of questionnaires. Respondent and analyses times could be minimized by only including those items which needed further clarification or were still subjects of considerable disagreement. Or an alternative is to send later editions of the questionnaires to only those respondents whose opinions differed from the majority.

Another modification of the basic Delphi technique is to apply it to a group setting. Using this approach participants generate activities in a series of small groups. They are then mailed the results of the small group sessions and requested to rank or agree/disagree with the resultant items (activities). The groups may then be reassembled for further clarifications and expansion of the prioritized activities.

These are only example modifications of the Delphi. The technique essentially represents a means for obtaining a majority or consensus of expert or representative input to decision making through providing feedback of results. As such, the Delphi can be modified in a number of ways to suit the information needs of decision makers.

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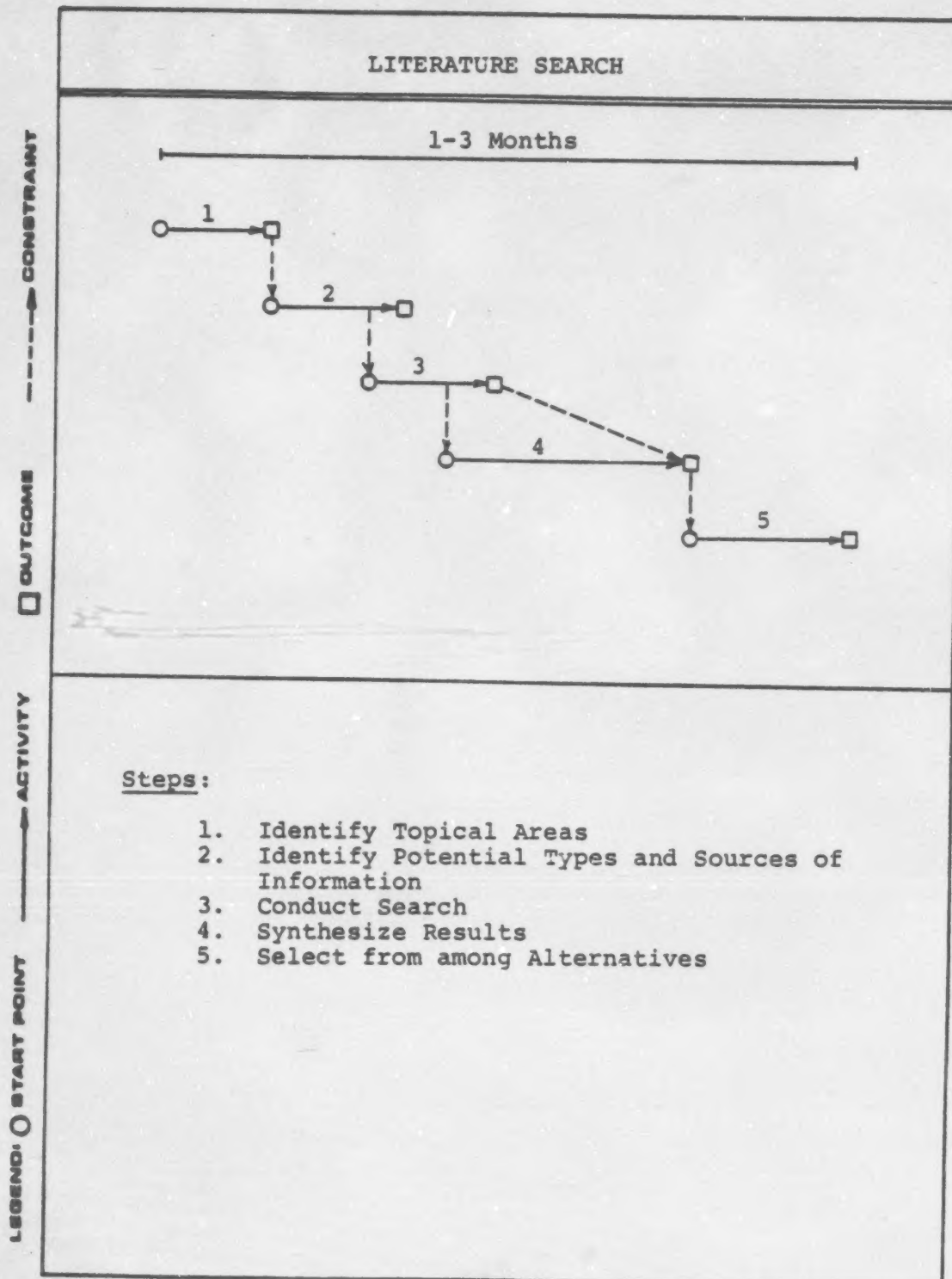
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LITERATURE SEARCH

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OVERVIEW

Numerous documents have been published describing activities which are potentially successful for providing vocational services to various special populations. Such documents include the results of research studies, published handbooks or guidelines for serving special populations, and descriptions of exemplary programs. Documents of interest can be identified through a methodical search of the literature. This could entail library searches; computerized searches; contacts with other State agencies, National and State vocational agencies/councils/organizations, and organizations representing special populations; or accessing curriculum data banks or resource centers. The search produces a range of potential activities for serving special populations. Selection from among these activities can be accomplished through an evaluation of alternatives by State agency staff. Alternatively, the potential activities can form the basis for a survey of local educators as to their perceptions of the relative effectiveness of the alternatives.

KEY CONSIDERATIONS

A literature search is a relatively inexpensive means of identifying potential activities for serving special populations. Expenses can include staff time, computer searches, purchase of publications and long distance telephone service. Each of these expenses varies dependent on the breadth and depth of the literature search and the amount of available information. Use of computerized searches is the most cost-effectiveness means of identifying relevant documents.	COST
A literature search requires at least one full-time staff member to initiate the search and screen documents for applicability. The individual responsible for conducting the search should have some knowledge of library science and be capable of exploring leads for further documentation. Additional staff are needed to evaluate and select from among the alternative activities identified from the literature. This task requires 3-4 State agency personnel on a part-time basis who are familiar with the State and Local education system and the characteristics of the population(s) to be served.	STAFF
The time required to complete a literature review ranges from approximately 3 weeks to 2 months dependent on the depth and breadth of the search. Analysis and selection from among the alternatives require an additional 1-3 weeks.	TIME

The literature search may require access to library and/or computer search facilities.	EQUIPMENT FACILITIES
Dependent on the type of search implemented the technique may require limited cooperation from State agencies, organizations or other sources of documentation.	PARTICIPANTS
Use of a literature search technique for identifying activities can be applied to a majority of special populations; however, the amount and quality of available literature vary for the different populations in question. Information on serving handicapped and disadvantaged populations is plentiful and up to date. Literature regarding vocational education services to women is becoming increasingly ample. Other populations, such as limited English-speaking and correctional inmates, have been the subjects of a limited amount of documentation.	APPLICATIONS
A literature review does not inspire the commitment to serving special populations as those techniques which involve LEAs and other outside agencies/groups in the identification and decision-making processes.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1 IDENTIFY TOPICAL AREAS

The first step in implementing this procedure is to define those topical areas to be targeted by the literature search. Broad topical areas can be identified directly from the State agency objectives of concern, e.g., mechanisms for improving the delivery of vocational education to disadvantaged students. Alternatively, the objective can be broken down into smaller program components based on more specific information needs for identifying activities. For example, in order to satisfy an objective related to equal access to vocational education programs by both sexes, the State agency may be interested in identifying effective guidance and placement services for women entering non-traditional program areas, such topical and sub-topical areas then form the basis for identifying potential types and sources of information and conducting the search.

STEP 2 IDENTIFY POTENTIAL TYPES AND SOURCES OF INFORMATION

In addition to sources uncovered through a traditional library search there is a variety of other potential sources of literature related to serving special populations. Which of these sources is accessed is dependent on the types of documents suited to the information needs of the State agency. To obtain information on a broad topical area the State may wish to initiate a computer search and then follow up on identified citations. For a more targeted search, such as identifying teaching materials for the handicapped, a different approach would be taken. In this case resource directories or other sources of curriculum information could be located through a national search of regional curriculum

resource centers. These materials could be supplemented by telephone contacts with other State agencies or administrators of exemplary programs. A portrayal of the types of documents which the State may be interested in obtaining and a listing of potential sources of these documents are provided in the following table. Double entries (XX) in the table indicate excellent sources of the particular document type. A single entry (X) signifies a potential source of the document type. This is followed by some examples of documents related to serving special populations that can be found in the literature. After reviewing the examples, the State agency should be better able to define the types of documents that are most suited to its needs and to access the appropriate sources of literature.

POTENTIAL SOURCES OF DOCUMENTATION

Document Types Potential Sources	Books/ Handbooks	Research Reports	Federal Documents	State Documents	Journal Articles	Biblio- ographies	Resource Directories	Pamphlets, Brochures, Etc.
University Libraries	X		X		XX			
Private Collections (NCRVE, AVA, NACVE)	X	X	X		X	X	X	X
Federal Depository Libraries	X		XX					
Computer Searches (NTIS, ERIC)	X	XX	X	X	X	X	X	
Curriculum Resource Centers	X			X			XX	
Research Coordinating Units	X	X		X	X			
Bibliographies/ Newsletters	X	X	X	X	X	X	X	X
Telephone Contacts	X	X	X	XX			X	XX

XX Excellent Source
X Possible Source

EXAMPLE DOCUMENTS PERTAINING TO
VOCATIONAL EDUCATIONAL SERVICES FOR SPECIAL POPULATIONS

Document Types	Example Documents
Books/Handbooks	Dahl, Peter R., Appleby, J.A., & Lipe, D. <u>Mainstreaming Guidebook for Vocational Educators</u>. Salt Lake City, UT: Olympus Publishing Company, 1978, 352 pp. Hull, Marc E. <u>Vocational Education for the Handicapped: A Review</u>. Information Series No. 119. Columbus, OH: The Ohio State University, ERIC Clearinghouse on Career Education, 1977, 67 pp. Rice, Eric, & Etheridge, R. <u>Strategies to Eliminate Sex Stereotyping and Sex Bias: An Administrators' Manual</u>. Chapel Hill, NC: System Sciences, Inc., 1977, 194 pp. Vetter, Louise, Burckhardt, C., & Sechler, J. <u>A Guide for Vocational Education Sex Equity Personnel</u>. Columbus, OH: The Ohio State University, The National Center for Research in Vocational Education, in print, 94 pp. Wall, James E. (Ed.). <u>Vocational Education for Special Groups</u>. Sixth Yearbook. Washington, DC: American Vocational Association, 1976, 351 pp.
Research Reports	Cameren, R. James, & Others. <u>Guidelines for Improvement of Vocational Programs and Resources to Serve Needs of Handicapped Students</u>. Final Report. Englewood, CO: Performance Management Specialists, Inc., 1975, 271 pp. Kumar, Vasant. <u>Handicapped Persons in Wisconsin's Vocational Technical and Adult Education: Assessment of Educational Techniques and Identification of Barriers</u>. Madison, WI:

Document Types	Example Documents
Research Reports	University of Wisconsin--Madison, Wisconsin Vocational Study Center, 1977, 89 pp. Lewis, Morgan V., & Kaltreider, L.W. <u>Attempts to Overcome Sex Stereotyping in Vocational Education.</u> University Park, PA: The Pennsylvania State University, Institute for Research on Human Resources, 1976, 273 pp. Women's Rights Project. <u>How to Erase Sex Discrimination in Vocational Education.</u> New York, NY: American Civil Liberties Union, Women's Rights Project, 1977, 77 pp.
Federal & State Documents	Mangum, Garth, & Walsh, J. <u>Employment and Training Programs for Youth: What Works Best for Whom?</u> Washington, DC: U.S. Department of Labor, Employment and Training Administration, Office of Youth Programs, May 1978, 207 pp. Parks, Jeanne S. <u>Education in Action: 50 Ideas that Work.</u> Washington, DC: U.S. Government Printing Office, 1978, 128 pp. U.S. Department of Health, Education and Welfare, Office of Education; and U.S. Department of Labor. <u>The Status of Bilingual Vocational Training, Fiscal Year 1977.</u> Washington, DC: Author (Initial), 1978, 38 pp. Duffy, Nishma I. <u>Guidelines: A Checklist Approach for Evaluating Your Program for Sex Equity.</u> Concord, NH: New Hampshire State Department of Education, Division of Vocational-Technical Education, 1978, 13 pp.

Document Types	Example Documents
Federal & State Documents	Iowa State Department of Public Instruction, Special Needs Section. <u>Special Needs Programming in Iowa: Vocational Education for the Disadvantaged and Handicapped, 1972-1974</u>. Des Moines, IA: Author, 1974, 217 pp. Tennessee State Department of Education. <u>Guidelines for Special Programs: VIP/VAP (Vocational Improvement Program/Vocational Advancement Program)</u>. Nashville, TN: Vocational Technical Program Services, undated, 49 pp.
Journal Articles	Naiman, Adeline. What to do about sex bias in the curriculum. <u>American Education</u>, April 1977, <u>13</u>, 3, 10-11. Ray, M. Douglas. Problems in serving handicapped users of vocational education. <u>The Wisconsin Vocational Educator</u>, 1974, <u>1</u>, 1, 11-14. Schenck, John P. Sexism in textbooks: A guide to detection. <u>American Vocational Journal</u>, October 1976, <u>51</u>, 7, 42-45. Tindall, Lloyd W. Breaking down the barriers for disabled learners. <u>American Vocational Journal</u>, November 1975, 47-49.
Bibliographies	Heath, Walter D., & Oglesby, E.H. <u>State Planning for the Delivery of Vocational Education to Special Populations, A State-of-the-Art Report, Volume II: Annotated Bibliography</u>. Raleigh, NC: CONSERVA, Inc., 1979, 117 pp.

Document Types	Example Documents
Bibliographies	Koba Associates, Inc. <u>Women in Non-Traditional Occupations--A Bibliography</u>. Washington, DC: Author, 1976, 187 pp. Magisos, Joel H., & Stakelon, A.E. <u>Special Needs Populations. Annotated Bibliographies on Bilingual, Correctional, Migrant, and Handicapped Populations with Unique Vocational Education Needs. Bibliography Series No. 33.</u> Columbus, OH: The Ohio State University, Center for Vocational Education, 1975, 142 pp.
Resource Directories	Harway, Michele, & Others. <u>Sex Discrimination in Guidance and Counseling. Annotations (Volume 2).</u> Los Angeles, CA: Higher Education Research Institute, Inc., 1976, 177 pp. Maloney, Patricia. <u>Resources of Mainstreaming Exceptional Students in Vocational Education Programs.</u> Palo Alto, CA: The American Institutes for Research in Behavioral Sciences, 1978, 80 pp. Tindall, Lloyd W., & Others. <u>A Bibliography of Materials for Handicapped and Special Education. Second Edition.</u> Madison, WI: Wisconsin University, Center for Studies in Vocational and Technical Education, 1978, 110 pp. Wentling, Tim L., & Others. <u>Resource Directory for Teacher Education in Vocational Special Needs.</u> Minneapolis, MN: University of Minnesota, Department of Vocational and

Document Types	Example Documents
Resource Directories	Technical Education, Minnesota Research and Development Center for Vocational Education, 1978, 80 pp. Women's Educational Equity Communications Network. <u>Hispanic Women and Education: Annotated Selected References and Resources</u>. San Francisco: Far West Laboratory for Educational Research & Development, 1978.
Pamphlets, Brochures, etc.	<u>Building Bridges, Increasing Access to Vocational Education through the Preparation of Bilingual Vocational Instructors</u>. Boston, MA: Fitchburg State College Bilingual Vocational Teacher Training Program. <u>Placement Preparation Program, A New Approach to Job Preparation for the Disabled and Disadvantaged</u>. New York, NY: ICD Rehabilitation and Research Center. <u>Special Cooperative Vocational Education</u>. Springfield, IL: Illinois Office of Education, Department of Adult, Vocational and Technical Education.

STEP 3

CONDUCT SEARCH

It is recommended that at least two of the available sources of literature be accessed. This is to assure adequate coverage of the topical areas of interest. For example, although a computerized literature search is capable of generating a breadth of documentation, it may not reveal the most recent literature on the subject. That is, there is a time lag between when a document is published and when it becomes an element of a computerized information retrieval system. Other sources are limited in their types of holdings. Thus, the most effective search accesses a variety of information sources.

Once the literature search is initiated, identified documents and sources of information begin to multiply. Most publications contain references to similar documents; these are often useful to follow up. Telephone contacts, if used to locate relevant documents, expand in a similar fashion. The investigation of these added sources of documents should continue until sufficient literature has been obtained to provide a range of alternative programs/services/activities for each topical area of interest.

STEP 4

SYNTHESIZE RESULTS

This step essentially consists of reviewing material obtained in the search and extracting pertinent information from the documents. As documents are identified they are reviewed in terms of:

- their applicability to the objective(s) of concern, and
- the breadth and depth of information presented on service approaches.

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Various types of descriptive and evaluative information are then extracted from those documents considered relevant to State objectives. This should include:

- Descriptions of the activities
 - Service mechanisms
 - Requirements for delivery
 - Environmental context
 - Characteristics of the target populations
- Evidence of success
 - Outcome measures
 - Quality of research methodology

STEP 5

SELECT FROM AMONG ALTERNATIVES

In this step information abstracted from the documents is compared with various State and sub-state characteristics, constraints and resources in order to identify those activities that are feasible to implement and possess the greatest potential for success. The alternatives are narrowed by first evaluating descriptions of the activities in terms of State characteristics. For example, the populations targeted by the activities are compared with needs identified in the State. Those that are inconsistent with State needs are then eliminated from the potential alternatives. Next, the requirements for delivery of each of the remaining alternatives are compared with State and local constraints and resources (e.g., budget, staff, equipment and facilities, attitudes). Those activities whose requirements exceed State resources are further evaluated as to:

1. whether they could be effectively adapted to better suit State/local constraints, or
2. whether existing resources could be modified or used more effectively in order to accommodate a potential activity.

This comparison further narrows the range of feasible activities for the State or local agencies to implement.

Thirdly, the relative effectiveness of the remaining alternatives is evaluated. Some documents may include objective measures of the activity's success in serving special populations. Others may require a subjective analysis of the activity based on experience in providing vocational education to a particular special population. This could entail evaluating the alternatives on various dimensions of effectiveness, such as:

- the number of individuals to be served;
- the anticipated completion rate;
- anticipated placement rate;
- usefulness over time; and
- beneficial side effects.

Dimensions to be included in this analysis can be extracted from the objective(s) addressed by the activity.

Finally, the alternatives are compared in terms of their relative costs and effectiveness. Given similar costs, the most effective or potentially effective activities would be implemented. However, given varying costs, judgments must be made as to what degrees of increased effectiveness warrant the consequent additional costs imposed on the agency. The most cost-beneficial alternatives are selected for implementation at the State or local levels.

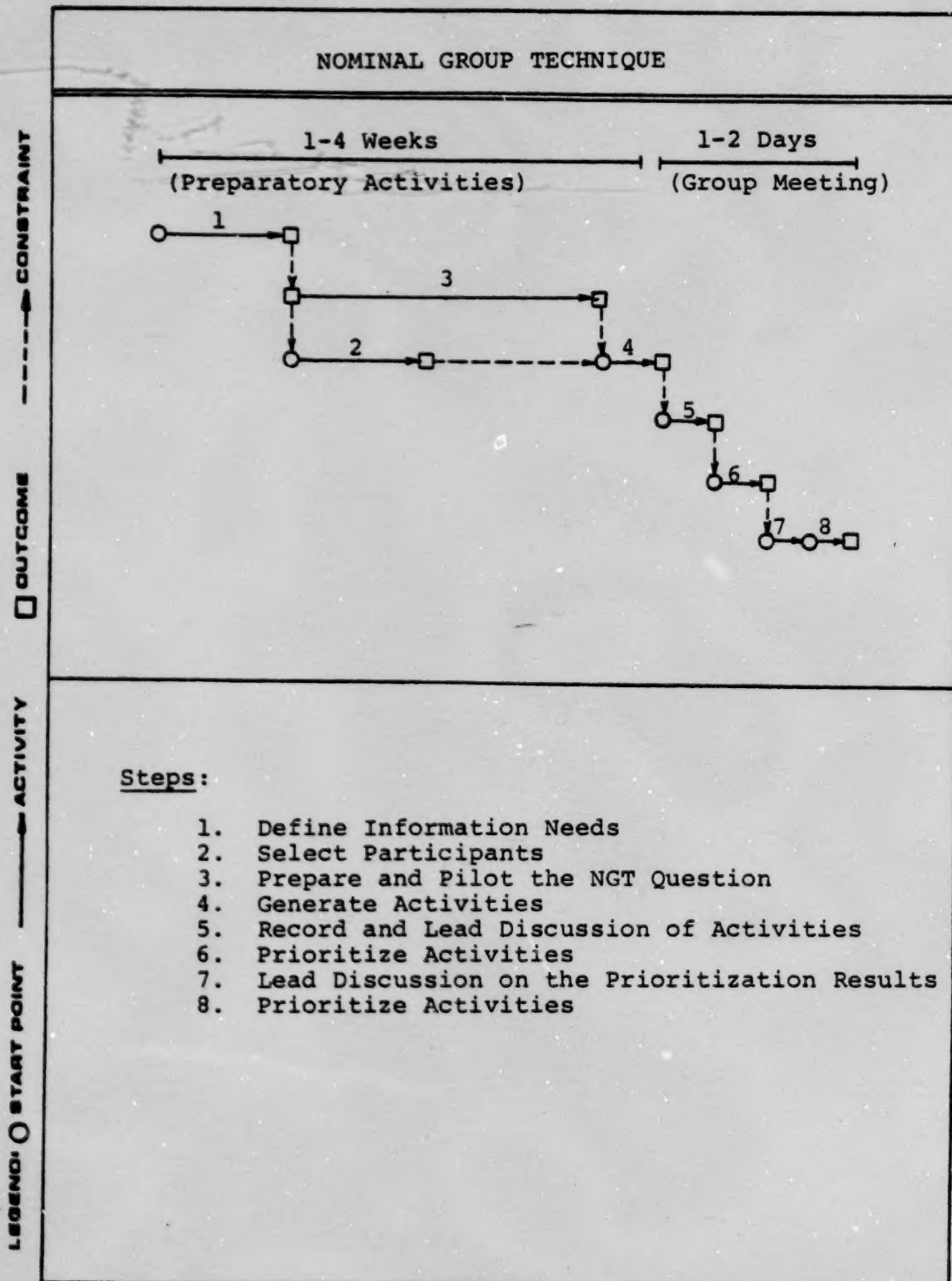
SAMPLE MODIFICATIONS

The literature review is not a highly structured technique for identifying programs, services, and activities. As such, the steps presented here can be modified in any way to better suit State agency needs. Additionally, a simplified method for selecting from among alternatives has been presented. The State agency may wish to employ a more formal cost-benefit analysis for selecting activities. Alternatively, the information collected through the literature review could be entered into a group procedure for decision making or form the basis for a structured-item survey of vocational educators for their perceptions of service requirements and relative effectiveness. These procedures are described elsewhere in this chapter.

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NOMINAL GROUP TECHNIQUE



OVERVIEW

The Nominal Group Technique (NGT) is a structured group process which can facilitate the generation of a large number of activities for serving special populations and the selection of the most effective activities for satisfying State vocational education objectives. It is a systematic means of soliciting individual responses and aggregating group judgments through mathematical rating or ranking rather than discussion or debate. Activities pursuant to State objectives of interest are generated independently by each group member. They are then solicited and recorded, one from each member at a time, until the lists of activities from all members have been disclosed in their entirety. Following this is a brief discussion, for clarification purposes, of each activity on the group list. Group members prioritize the activities by ranking or rating the activities as to their relative effectiveness.

The final steps of the group process depend upon the number of groups participating. If there is but one group, the preliminary voting is followed by a brief discussion of results and a final voting. When more than one group is involved, a master list is prepared combining the results for each group. There is a general discussion of the master list for purposes of clarification and additions, followed by a final vote.

KEY CONSIDERATIONS

The Nominal Group Technique typically involves minimal expense for implementation. Factors contributing to the expense are 1) staff time, 2) meeting room charges (if any), 3) supplies (minimal) and 4) location of the participants. The number of staff required depends directly upon the number of groups involved in the nominal process. Typically, one staff member per group is sufficient to serve as both leader and recorder. If the participants are located out of town, other expenses may include long distance phone calls and travel reimbursements.	COST
The Nominal Group Technique requires that at least one staff member be trained in leading the group(s) through the identification of activities. If there is more than one group, the option exists to have 1) one over-all group leader and individual group recorders or 2) leaders for each small group. Leadership skills include understanding the process, having a strong background in vocational education and the special population under consideration and possessing the ability to maintain control over a group of people. The nominal group team will need to be involved for at least two days in preparatory tasks and one day for implementation of the procedure.	STAFF
Time considerations in implementing NGT include 1) physical preparation time (arranging a meeting room and gathering supplies), 2) selecting and contacting the appropriate persons to serve as participants, 3) completing the design tasks (identifying the agency's information needs and developing and piloting alternative nominal questions), and 4) conducting the group meeting. Dependent on the difficulty in identifying participants and scheduling the meeting, the preparatory tasks (1,2, & 3) require one to four weeks (calendar time) to complete. The minimal time for completing the group process is 1 day.	TIME

A large enough meeting room to accommodate the number of participating groups is required for implementing the Nominal Group Technique. Suggested supplies include a flip chart and felt pen for each group, approximately seven 3x5 cards for each participant, pencils and paper.	EQUIPMENT FACILITIES
In order to effectively complete the nominal group process, it is essential that participants share a common frame of reference so that they can communicate ideas. Participants must also share an interest in the provision of vocational education services to the special population and be willing to attend a highly structured group meeting.	PARTICIPANTS
The Nominal Group Technique can be used to identify activities for any target population by adjusting the nominal question and selected participants to fit the population. The technique is useful for pooling individual judgments when a diversity of opinion exists. It is particularly suitable to determine solutions to a singular problem area such as that targeted by one or more objectives.	APPLICATIONS
The Nominal Group Technique guarantees balanced participation among members and restricts domination by those individuals who are more expressive or have more authority. NGT also serves to create an awareness among the participants of State and national concerns regarding the special population and of the perceptions of their professional associates. Participation in the nominal group process tends to promote interest in the delivery of services to the special population.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

DEFINE INFORMATION NEEDS

The first step in utilizing the Nominal Group Technique is to outline the type or types of information which are needed to identify alternative programs, services or activities. Direction for this step is provided by the objectives developed in the previous planning stage. However, it is important that decision makers clarify what information would be necessary to select activities to achieve these objectives and how the information will be used. For example, an objective targeted to handicapped students might read:

By September 1, 1980, each Local education agency shall provide the necessary support services for all eligible individuals with exceptional needs (adapted from the California Five-Year State Plan, 1977, p. 3-35A.

In order to achieve this objective, information is needed on the types of support services which are perceived to be the most effective in serving individuals with various handicapping conditions. Additionally, information is needed as to what types of activities the State agency could initiate to encourage or facilitate the implementation of identified support services at the local level.

In defining information needs, consideration should be given to all objectives of the State agency. In some instances multiple objectives may have the same or similar information needs. Thus, duplication of effort can be eliminated by simultaneously collecting information on different objectives with similar data requirements.

The process of defining information needs should include all those individuals who will make use of collected data, e.g., planners, administrators, coordinators of service to special populations, or representatives of other

State agencies. The process will then provide direction to the implementation of the procedural steps which follow.

STEP 2

SELECT PARTICIPANTS

It is recommended that each nominal group be composed of 5-9 members. The number of groups to be included in the process is dependent upon the specificity of the information needs of the State agency and the variety of input desired. For the example provided in Step 1, a number of participants would be selected in order to adequately represent the interests of each type of handicapping condition.

Delbecq, et al. (1975) suggest the following characteristics of participants in the NGT.

CHARACTERISTICS OF PARTICIPANTS

- Participants have a strong interest in the problem of serving the special population.
- Participants have knowledge of and experience with the special population.
- Participants share a similar enough frame of reference so that they can communicate effectively with one another.

The individuals selected for participation in the nominal group process are dependent on the special population under consideration. Individuals representing other State agencies involved in the delivery of services to the special population and Local education agencies should be included in the identification of activities. One way to select participants is through a nomination process. State agency personnel can select from among those persons nominated according to the characteristics described above. Once the appropriate persons have been identified, they should be contacted and their time schedules coordinated for the meeting.

STEP 3

PREPARE AND PILOT THE NGT QUESTION

The NGT question is the basis of the nominal group process; the effectiveness of the results depends largely on the quality and focus of the question. The NGT question follows directly from the information needs identified in Step 1. For the example objective provided in that step, an appropriate question could be phrased:

What types of modifications or support services do you view as most effective in providing vocational education to handicapped individuals? Please include the type of handicapping condition(s) for which the service is appropriate.

In this example, responses will vary substantially dependent on the type of handicapping condition. Alternatively, each type of handicap could be addressed by a separate NGT question:

What types of modifications or support services do you view as most effective in providing vocational education to individuals with visual impairments?, etc.

It is suggested that several alternative questions or sets of questions be developed so that during the pilot testing it can be determined which is most appropriate for eliciting the desired information.

After the NGT questions have been developed, the next task is to pilot test them with a sample group(s). The sample group(s) should resemble as closely as possible the groups that will participate in the actual activity selection process. Responses to each question are compared to determine which question most effectively satisfied the State agency's information needs. Upon completion of the pilot test, any necessary modifications should be made.

STEP 4

GENERATE ACTIVITIES

At the onset of the group meeting, participants are given an explanation as to the purpose and importance of the meeting, and the procedural steps to be followed for generating activities are outlined. Participants are divided into groups of from 5 to 9 members. If separate NGT questions have been developed for populations with various conditions (e.g., handicaps), it is advantageous to divide the participants into homogeneous groups, each receiving the appropriate question. With a single NGT question, heterogeneous groups may be more desirable. Participants are then presented the NGT question in written form and asked to work silently and individually on their responses to the question. The time allotted for this step depends on the breadth of the question and is regulated by the group leader so as to maintain control over the length of the meeting.

STEP 5

RECORD AND LEAD DISCUSSION OF THE ACTIVITIES

The activities independently generated by participants are recorded by each group leader in a round robin fashion. Activities are solicited and recorded on a flip chart, one from each participant at a time, until the lists of activities from all members have been disclosed in their entirety. After the activities are recorded on the flip chart, each one is discussed in turn. This discussion is mainly for purposes of clarification of meaning or rationale, rather than a debate as to the relative effectiveness of various activities. Therefore, it is necessary for the group leader to maintain control over the discussion to

ensure that no activity is neglected while others receive greater focus. For each activity listed, group members are asked to provide their impressions of what the activity entails and the logic behind its inclusion on the list. Differences of opinion can be stated, but the group leader must see to it that they are merely recorded and not argued over.

STEP 6

PRIORITIZE ACTIVITIES

In determining the priority of the alternative activities, group members independently select 5 to 7 of what they consider to be the most effective. Next, they rank those activities selected from one to five.

The ranking can be done through the use of 3x5 cards. Group members individually select the 5 (or 7) most effective activities and write each in the middle of a 3x5 card. The activities are then ranked from 1 to 5, with 1 indicating the least important and 5 indicating the most important. The cards are collected and the votes are tallied on the flip chart for review. An aggregate group priority ranking is calculated by multiplying the number of times the activity was ranked by the sum of the ranks and ranking the products. An example of this is provided in the following table.

GROUP RANKINGS AND PRIORITIZED ACTIVITIES

Activity Number	Ranks	No. of Times Ranked	Sum of Ranks	Product of No. of Ranks X Sum	Group Priority
1	4,5,2,5,5	5	21	105	2
2	1,2,1,1	4	5	20	5
3	3,3,2,3	4	11	44	3
4	2,1,4,2	4	9	36	4
5	5,4,5,4,5	5	23	115	1
6	2,1,3	3	6	18	6
.					
.					
.					

STEP 7**LEAD DISCUSSION OF THE PRIORITIZATION RESULTS**

If there is only one group participating in the process, discussion occurs immediately after the recording of results on the flip chart. Again discussion is for clarification purposes only, not debate. This discussion can reveal similarities in members' criteria for ranking and clear up any problems due to misunderstanding or misinformation.

If more than one group is involved, group leaders or recorders combine all group priority activities into a master list. For the example presented in this discussion, distinctions between activities for varying handicapping conditions are retained. All the group members then participate in a discussion of the priority activities. Group members may suggest the addition of any activities they deem appropriate.

STEP 8**PRIORITIZE ACTIVITIES**

The same procedures as presented in Step 6 are followed. If more than one group is involved in the NGT, the groups are combined for the final prioritization. In our example, the number of handicapping conditions which the activity addresses should be included as a consideration in the prioritization process.

SAMPLE MODIFICATIONS

In cases where there is only one group participating in the activity identification process, the Nominal Group Technique can be concluded at Step 6. However, Delbecq, et al. maintain that Steps 7 and 8 increase "judgmental accuracy," and for that reason it is desirable to include them. During the discussion preceding preliminary prioritization, differences due to unequal information, misinformation or a misunderstanding of the activity's meaning can be clarified. The additional clarification provided in Step 7 can result in a more accurate final prioritization of activities in Step 8. Steps 7 and 8 are essential in those cases where the activities of more than one group must be combined.

An alternative means of determining priority activities for achieving objectives is to employ a rating rather than ranking procedure. This facilitates the prioritization process when there is a large number of activities to select from. Using a rating technique participants rate their perception of each activity's effectiveness (e.g., on a scale from 1 to 5, with 5 representing a highly effective activity). Participant ratings can then be averaged, and those activities with the highest mean (or median) effectiveness ratings are selected for implementation.

FOR ADDITIONAL INFORMATION

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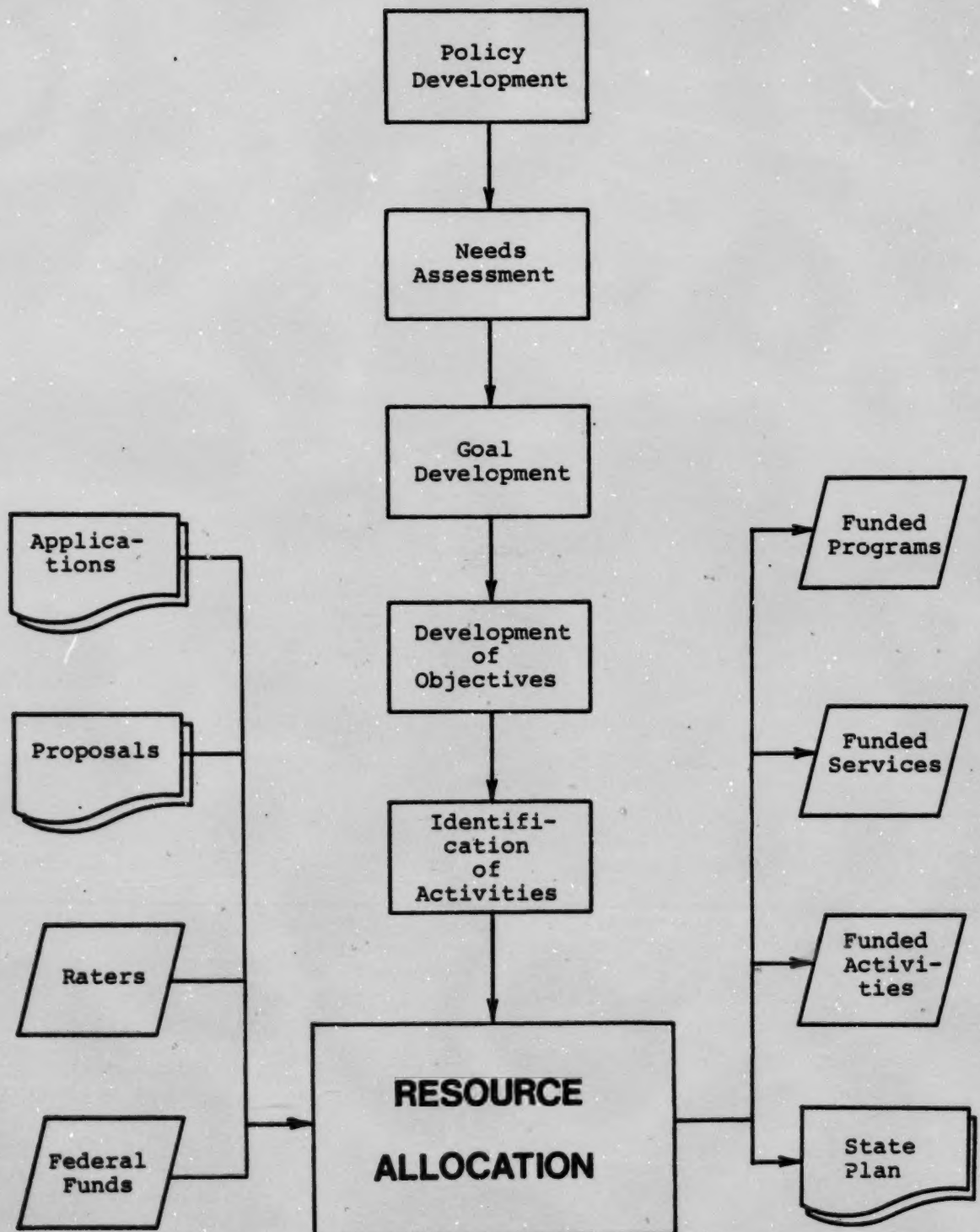
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CHAPTER EIGHT



RESOURCE ALLOCATION

The final component of the E.S.P. Planning System is the allocation of resources to programs, services and activities for delivering vocational education to special populations. Allocation involves first reviewing Local applications, then prioritizing the applications and finally distributing funds. Generally, these functions are conducted under two modes: 1) the project mode, where resources are allocated to a defined set of activities which result in a tangible product within a specified time frame; and 2) the programmatic mode, where resources are allocated to programs or processes which continue over time. Alternative procedures for resource allocation address these two modes and are presented for three key activities:

<u>Key Activity</u>	<u>Page</u>
1. Review of Local Applications for Funding	5
2. Prioritization of Local Applications	35
3. Distribution of Federal Funds	51

In implementing any of the presented procedures, the following characteristics should be considered. These characteristics of the funding allocation process enhance any of the procedures selected and will thus result in funded programs, services and activities most compatible with the identified needs of special populations

Characteristics of the Process

1. Data which are used in the allocation formula reflect the current incidence and geographic distribution of special populations.
2. Eligible recipients are provided with information on the types of programs, services and activities for special populations which should be given priority consideration in the development of local plans and applications.
3. Eligible recipients are required to identify the relationship between their proposed activities directed at special populations and those programs, services and activities which will be supported by the State vocational education agency.
4. Local applications are reviewed and rated by the State agency according to the extent to which the applications are responsive to the goals and objectives relating to special populations.
5. Funds are budgeted for special projects which are designed to assist special populations but are not included in the programs or services to be provided by local eligible recipients.

Characteristics of the Products

1. The allocation formula contains factors which represent the distribution of those special populations being targeted by statewide goals and objectives.
2. Local application forms and accompanying directions are designed to enable eligible recipients to show linkages between locally proposed activities and statewide goals and objectives for special populations.
3. Programs, services and activities associated with each objective for special populations are funded.

REVIEW OF LOCAL APPLICATIONS FOR FUNDING

In this section alternative procedures are presented for the review of funding applications for eligible recipients to provide programs, services and activities to special populations. The purpose of this review is to determine the approval status of local applications for funding. Review procedures are dependent upon which of two basic approaches to allocation of resources is chosen. Basically, the State agency has the choice of allocating resources according to a project mode or a programmatic mode. In the project mode, resources are allocated on a project-by-project basis. A project is generally a rather well-defined set of activities that result in a tangible product within a specified time frame. The implied assumption is that a project has a definite life span and will terminate with the production of a designated product. As such, the project mode is particularly well-suited to the design, development and implementation of educational products resulting from program improvement activities and supportive services. In contrast, the programmatic mode focuses on the conduct of activities over time. Because the emphasis is more on the process rather than the product, the programmatic mode of resource allocation is well-tailored to the initiation of new programs and/or the maintenance of existing programs. Because of the basic differences in these approaches to resource allocation, reviews of local applications for funding under each of these allocation modes are presented as separate procedures.

<u>Procedure</u>	<u>Page</u>
Application Review Under the Project Mode	
overview	7
key considerations	8
implementation steps	10
Application Review under the Programmatic Mode	
overview	23
key considerations	24
implementation steps	26

APPLICATION REVIEW UNDER THE PROJECT MODE

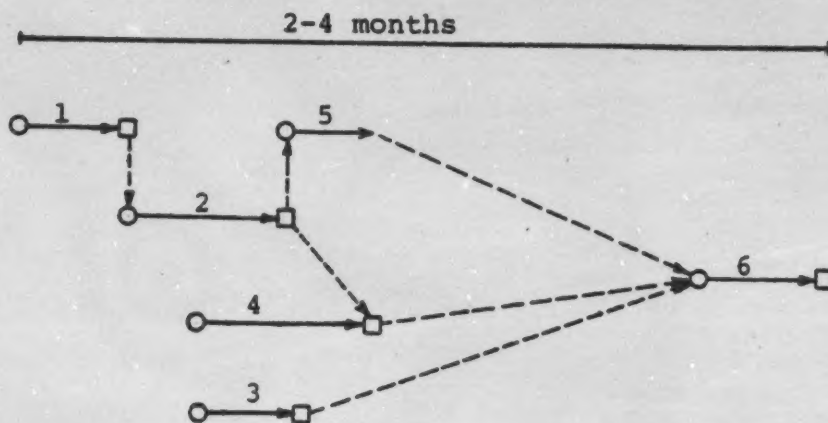
APPLICATION REVIEW UNDER THE PROJECT MODE

CONSTRAINT

OUTCOME

ACTIVITY

LEGEND: ○ START POINT



Steps:

1. Select Programs, Services and Activities to be Funded
2. Develop RFP
3. Establish Project Approval Criteria
4. Determine Project Review Procedure
5. Disseminate RFP to Eligible Recipients
6. Review Project Proposals

OVERVIEW

This alternative presents an approach to the review of local applications that is consistent with the project mode of resource application. The project mode requires that resources be distributed through the Request for Proposal (RFP) process. Proposals submitted by eligible recipients in response to RFPs constitute local applications for Federal funding. Proposals as local applications are reviewed by the State agency, and decisions are made as to whether they are approved for funding. This procedure, therefore, details the steps necessary to develop and disseminate the necessary RFPs, to review project proposals received and to determine the approval status of received proposals.

KEY CONSIDERATIONS

The principal cost incurred in the use of this procedure is professional staff time. The most significant factor requiring professional staff development time is the preparation of the RFPs. Professional time is also required in the review of the proposals submitted in response to the RFPs. Other significant cost considerations are the clerical support staff time required to prepare the RFP and those costs associated with their printing and dissemination.	COST
Preparation of the RFPs will require State agency professional staff who are familiar with the substantive content area of the RFP to be developed. Depending upon the number of RFPs and the range of content, the involvement of professional staff in their preparation could be rather extensive. Review of submitted proposals will require the collective expertise of a variety of educational professionals including those familiar with research methodology, evaluation design, the needs of special populations and the substantive content areas addressed by the proposals.	STAFF
Depending upon the complexity and scope of an RFP, one to two weeks of professional staff time will be required for preparation. Review will require from one and one-half to two hours per proposal depending upon the length and complexity of the proposal. Development of the project review criteria and the design of the project review procedures should require no more than two weeks of professional staff time to accomplish. Scheduling of project reviews can be accomplished in one to two days and can be performed by clerical personnel. Thus, allowing time for eligible recipients to respond to the RFP(s), the procedure will require at least two months and perhaps as much as four months to complete.	TIME

Conference rooms will facilitate the project reviews.	EQUIPMENT FACILITIES
Depending on the number of RFPs prepared and the magnitude of the response, a wide variety of agency personnel can be expected to be involved in the development and review processes. Outside participants could include representatives from special education, vocational rehabilitation, mental health, agencies on the aging, employment and training councils and other agencies concerned with the needs of special populations. Local education agencies, other service providers and other eligible recipients, such as universities, advisory councils and research development organizations, are potential respondents to the RFPs.	PARTICIPANTS
The project mode is particularly useful whenever the activity to be funded results in a tangible product to be produced in a specified time frame. In this sense the project mode is particularly well-suited to program improvements and supportive services. This should not be construed to mean that the project mode is not applicable for funding ongoing activities occurring over a sustained period of time. In this case, the project mode may be used to fund particular stages such as program design or implementation.	APPLICATIONS
The project mode, because it has the potential of greater targeting of funding effort, requires greater specificity of programs, activities and services generated in the process of planning for special populations. The increased specificity necessitates a more centralized State planning effort and provides an opportunity for closer monitoring of local activities.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

SELECT PROGRAMS, SERVICES AND ACTIVITIES TO BE FUNDED

The first step in the review process is to select the programs, services and activities to be considered for funding. Since it is quite likely that not all those identified in the fifth component of the Planning System will be able to be funded within a single fiscal year, it is necessary that those programs, services and activities selected for funding within the fiscal year under consideration be identified. To facilitate selection, it is first necessary to establish funding pools. Funding pools are defined as categorizations of Federal funds according to specified sections of Title II of P.L. 94-482. Whereas the specificity of funding pools may vary considerably, it is suggested at a minimum that separate funding pools be established for the following areas.

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SUGGESTED FUNDING POOLS

<u>Pool</u>	<u>P.L. 94-482</u>
• Handicapped, disadvantaged and limited-English speaking	Sec. 110
• Research activities pertaining to the needs of special populations	Sec. 131
• Exemplary and innovative programs	Sec. 132
• Curriculum development efforts	Sec. 133
• Vocational guidance and counseling programs, services and activities pertaining to the needs of special populations	Sec. 134
• Activities for overcoming sex stereotyping and bias	Sec. 136
• Special programs for the disadvantaged	Subpart 4
• Consumer and homemaker education in economically depressed areas or areas with high rates of unemployment	Subpart 5

Previously identified programs, services and activities should be assigned to funding pools whose purposes as specified in P.L. 94-482 are most congruent with the intent of those programs, services and activities. Programs, services and activities assigned to funding pools should be prioritized within each pool according to their importance for funding, as established in the previous component of the Planning System. If these elements have not been previously prioritized, they should be ranked within each funding pool according to the importance for funding from currently available funds.

Given the prioritization of programs, services and activities within funding pools, a specified amount of funds should be budgeted to each program/service or activity. The amount of funds budgeted will depend upon the expansiveness of the programs, services and activities envisioned and the number of replications across the State. For example, the amount of funds budgeted to develop a curriculum for overcoming sex bias will depend in part upon whether one model curriculum is to be developed and then disseminated across the State or whether a number of curriculums will be developed by eligible recipients to serve their unique needs. The amount of funds allocated to this project would therefore depend upon which strategy was chosen. Consequently, each program, service or activity should be assessed in terms of the desired breadth of each project and the scope of replications of the project across the State.

The budget allocated for each program, service and activity and the priority assigned should be reviewed and revised as necessary. This review and revision might well be performed by a team of State agency personnel. Depending on the content of the specific program, service or activity, team membership might include the handicapped and/or disadvantaged consultant, sex equity coordinator, agency representative from the RCU with experience in project budgeting, and one or more content area specialists as required by the nature of the specific program, service or activity being reviewed.

Once the budget allocations and priorities have been established, programs, services and activities should be selected as candidates for funding in order of priority until the funding pool has been exhausted. The programs, services and activities selected for funding within each funding pool should be examined for reasonableness and consistency with Agency intent and expectations. Inconsistency should be reduced by adjusting the budget allocations and/or the priority assignment. These adjustments should continue until the team

is satisfied with the integrity of the set of programs, services and activities selected to be funded within the current funding cycle.

STEP 2

DEVELOP RFP

A Request For Proposal (RFP) should be developed for each program, service and activity selected for funding. A preliminary consideration in the development of an RFP is the preparation of an initial planning sheet. This planning sheet for each RFP should specify:

1. Objectives to be accomplished
2. Tasks necessary to accomplish the objectives
3. Products resulting from the task
4. Time frame for the project

The planning sheet should be in abbreviated form, possibly no more than one page in length. This abbreviated form forces a consideration of the essential ingredients of each proposed RFP.

The planning sheet serves as the initiating document for RFP preparation. Planning sheets, once developed, should be reviewed by a committee. This committee may be the same as that utilized in Step 1 above, or may be constituted to reflect increased participation of agency personnel with experience in RFP preparation. Each item on the planning sheet should be thoroughly reviewed so as to achieve consensus on:

- the purpose of the RFP as specified by the objectives
- the sufficiency of the tasks proposed
- the adequacy of the products required and
- the reasonableness of the time frame.

Once consensus is established, the planning sheets can be expanded into an RFP. An RFP should contain information needed by prospective bidders in preparing a proposal. Typically, this should include the following items.

SUGGESTED CONTENTS OF RFPs
● Background information and rationale for the project ● Project objectives ● Description of tasks to be performed and products to be delivered ● Time frame for completion of the project ● Funds available ● Proposal submission date ● Guidelines and specifications for preparing technical and cost proposals ● Proposal review criteria ● Application agreements/assurances

Depending on the type of program, service or activity addressed by the RFP, bidders should be required to provide any number of the following sections in a proposal.

TYPICAL PROPOSAL REQUIREMENTS

- Abstract of the proposed project
- Statement of need and the problem to be addressed
- Specification of the procedures for the accomplishment of each objective
- Management plan for the allocation of resources to achieve the desired objectives
- Description of the proposed results or end products to be accomplished
- Evaluation plan (to the extent appropriate)
- Plan for the dissemination of products (to the extent appropriate)
- Staff capabilities and experience
- Institutional or organizational commitment to provide adequate facilities and equipment
- Itemized budget
- Assurances of compliance with State and Federal rules and regulations

STEP 3**ESTABLISH PROJECT APPROVAL CRITERIA**

Project approval criteria represent the standards for judging quality and compliance considerations of proposals received from eligible recipients. Quality and compliance should be evaluated in the following areas:

- technical approach;
- management plan;
- evaluation plan (if appropriate);
- dissemination plan (if appropriate);
- staff allocation;
- institutional commitment;
- budgetary considerations; and
- assurances.

The technical approach should focus on the extent to which there is a clear definition of the need for the proposed project and a succinct delineation of the problems to be addressed. The objectives of the proposed project should be sharply defined, clearly stated, capable of being attained through the use of the proposed procedures and capable of being measured. Procedures for the attainment of the objectives should be clearly stated and should specify how each objective will be attained. The management plan should show the time lines for each of the major project activities, the interrelations between project activities, and should provide a detailed specification of project results. Staff allocation should address eligible recipients' willingness to assign staff adequate both in number and experience to achieve the proposed objectives. Institutional commitment should provide reasonable evidence of the applicant's commitment to the project in terms of willingness to provide the necessary supportive equipment and facilities as well as their willingness to provide documented evidence that the necessary support from cooperating institutions and agencies has been obtained. Budgetary considerations should evidence reasonableness of the cost estimates considering the size, scope and duration of the proposed project. Judgments as to the

evaluation proposed should focus on the suitability of the evaluation criteria and the evaluation methodologies proposed as a means of determining whether project objectives have been achieved. The dissemination efforts should be judged according to the extent to which the proposed dissemination activities are deemed adequate to communicate project results to the intended target audiences.

Rating scales should be developed for each of the selected criterion areas. This can be accomplished by the following steps:

1. Prepare a narrative describing the desired characteristics of a proposal meeting that criterion. For example, this could consist of an expansion of the narrative presented in the previous paragraph.
2. Assign to each criterion a fixed amount of quality points, representing the relative importance desired for each of the criterion areas. These quality points represent a maximum value that a proposal could receive in the evaluation or rating process. For example, Technical Approach could be assigned 20 points; Management Plan, 10 points; Evaluation Plan, 10 points; etc. It is helpful for comparison purposes if the total points assigned to the criterion areas total 100.
3. Develop a rating scale for each criterion area and assign a range of the quality points to each of the scale levels. For example, if 20 total quality points were assigned to the Technical Approach criterion area, a rating scale could be devised as follows.

<u>Quality Points</u>	<u>Scale Value</u>
0	Not addressed in proposal
1-10	Inadequately addressed in proposal
11-20	Adequately addressed in proposal
21-30	Excellentlty addressed in proposal

Requiring the rater to note critical incidents of strengths and weaknesses supporting each rating tends to improve the quality of the ratings obtained. These critical incidents can be easily obtained by providing a space underneath each criterion rating scale for the rater to note the strengths and weaknesses supporting the assignment of quality points to each criterion. Once these quality points have been assigned, through the rating process, to each criterion, they can be summed across all of the criteria. The total score then represents the overall rating assigned by a single rater to the project being rated. If multiple raters are used, the scores can be averaged across raters.

STEP 4

DETERMINE PROJECT REVIEW PROCEDURE

The project review procedure should seek to involve as wide a constituency of rater expertise as possible. Depending upon the content of the RFP, rater representation might conceivably include those with expertise in research design, curriculum development, counseling and guidance, evaluation, dissemination and the substantive content area(s) covered by the nature and scope of the content of the RFP. To the extent that assessment of the quality of the proposals might be enhanced by the application of expertise external to vocational education, representation from external agencies should be sought as appropriate; e.g., special education,

vocational rehabilitation, developmental disabilities, and employment and training.

Once the raters have been identified and have agreed to serve, a schedule for reviewing the proposals should be determined. This schedule should allow for an orientation of the raters to the procedures to be used in assessing the quality of the obtained proposals and be consistent with the schedule of time allowed for proposal preparation.

STEP 5

DISSEMINATE RFP TO ELIGIBLE RECIPIENTS

Determination of those to receive the RFP will depend upon eligibility criteria. The determination as to those institutions considered eligible to bid on an RFP will depend in large part upon the following:

- The nature of the program, service or activity to be funded
- The basic need addressed by the RFP
- The special needs populations to be served
- Those educational agencies and institutions best able to serve special needs populations
- The existence of certain prerequisite organizational capabilities necessary to provide the required program, service or activity

As an obvious example of eligibility requirements, programs to improve the access of vocational education to older adults would obviously be restricted to those agencies and institutions serving adults.

Determination of eligibility criteria is equivalent to allocation of responsibilities for offering programs, services and activities among the various levels of education and institutions as mandated in P.L. 94-482, [Sec. 107(b)(2)(iii)]. Determination of eligibility should include consideration of external agencies as potential offers of vocational programs, services and activities. With regard to special populations, these external agencies might include:

- Private vocational schools
- Correctional institutions
- Community-based organizations
- Community action agencies
- Civic organizations
- Unions
- Private employers
- Voluntary organizations
- Local governmental or quasi-governmental organizations responsible for the needs of special populations
- Sheltered workshops
- Private associations devoted to the provision of services to special groups

Eligible recipients also include all State-operated vocational schools and institutions that have a separate organizational autonomy. Consortiums of eligible recipients such as planning units and intermediate units are generally not considered to be eligible recipients.

Once the eligibility criteria have been established, the criteria should be used to identify organizations and institutions eligible to apply for funds, and the RFP distributed to those organizations and institutions which are eligible. The extent of the dissemination will depend upon the specificity of the eligibility requirements. Well-specified eligibility requirements will reduce the likelihood of receiving applications from unqualified or marginally qualified applicants and will thus serve to enhance the likelihood that programs, services and activities will be developed and implemented so as to meet the intent of the stated objectives.

The RFPs may be disseminated singly or grouped together and disseminated in a booklet form. The advantages of disseminating individual RFP announcements is that better targeting can be achieved since the RFPs will be disseminated only to those potential applicants who meet eligibility requirements. The advantages of assembling all RFPs in a

booklet form and disseminating them as a package is simplification of the dissemination effort. Dissemination of the booklet to a group of identified recipients places the burden of determination of eligibility on the recipient rather than upon the State agency. Whereas there is a savings in effort, there is a corresponding trade-off in the increased number of marginally qualified applicants who may apply.

STEP 6

REVIEW PROJECT PROPOSALS

Proposals received should be logged in by an RFP code number that has been assigned to each RFP issued. All proposals received in response to that RFP code should be collected after the deadline date and turned over to the chairperson of the appropriate project review committee. The chairperson of the review committee should assign proposals for review to individual committee members identified in Step 4. Ideally, all committee members should review all proposals assigned to that review committee. Each reviewer should rate all proposals without benefit of communication with other members of the review committee. Upon completion of the initial review, the committee should be convened and each proposal discussed in terms of its rated strengths and weaknesses. After a discussion of the merits of each proposal, raters should be provided an opportunity to adjust their ratings so as to reflect any changes in their judgments as a function of the group discussion. If the sheer size of the number of proposals received prohibits review of all proposals by each group member, procedures should be adjusted so that each group member has a manageable number of proposals to rate. Care should be exercised to ensure that all proposals are rated by at least two members of the review panel.

The review panel should make a collective judgment as to the approval status of each proposal. Each proposal reviewed should be assigned to one of three categories: approved for funding as is, approved for funding with appropriate modifications or disapproved for funding. For those projects that are given conditional approval, the conditions necessary for approval should be noted and the limitations and weaknesses of the present proposal described. For those proposals disapproved for funding the reasons for disapproval should be well-documented with specific instances of weaknesses in the various criterion areas noted. This documen-

tation is especially useful as supportive evidence in any subsequent adjudication process that might result.

The chairperson of the review panel should be responsible for the preparation of a report indicating the disposition of every project received and the justification for that disposition. This justification should be based on:

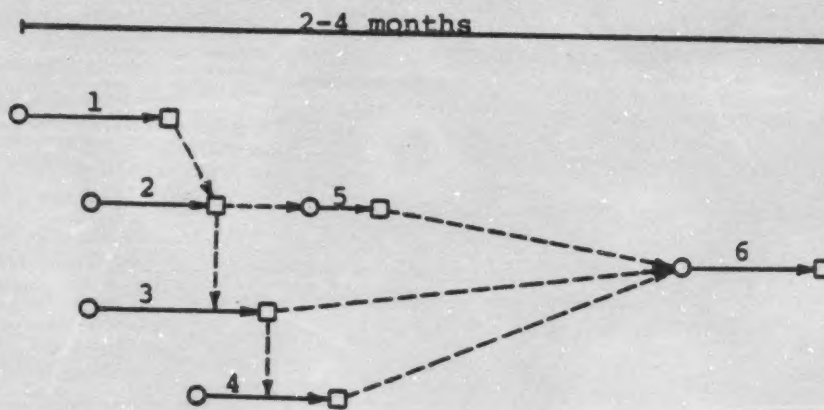
- the average total score ratings assigned to that project;
- the average ratings for each of the component criteria used to rate the projects;
- the synthesized judgments as to the strengths and weaknesses of the project; and
- the chairperson's synthesis of the consensus of the panel as to the merit of the project.

Conditional upon the approval of the appropriate decision-makers, notification of the disposition of proposals should be sent to each submitting agency or institution. Those agencies or institutions submitting conditional proposals should be given the opportunity to submit modified proposals. Those agencies that choose to submit a modified proposal should have their revised proposals reviewed and a decision made as to their approvability for funding. Thus the final result of this step is a set of proposals approved for funding.

**APPLICATION REVIEW UNDER THE
PROGRAMMATIC MODE**

APPLICATION REVIEW UNDER THE PROGRAMMATIC MODE

LEGEND: ○ START POINT — ACTIVITY □ OUTCOME - - - - - CONSTRAINT



Steps:

1. Select Programmatic Activities for Funding
2. Develop Planning Guidelines for Each Funding Pool
3. Establish Criteria for Application Review
4. Determine Project Review Procedure
5. Disseminate Planning Guidelines
6. Review Program Applications

OVERVIEW

This procedure describes a programmatic approach to the review of local funding applications. Programs, services and activities deemed necessary for the achievement of state objectives are grouped into major priority areas. Eligible recipients are encouraged, through planning guidelines, to propose a programmatic approach to these priority areas based upon local need. Eligible recipients apply for special population funds as a part of the established annual planning and funding application cycle. Applications for funds to serve special needs populations are reviewed and the approval status of these applications determined.

KEY CONSIDERATIONS

The principal contribution to cost under this approach is the professional personnel time required for preparation of planning guidelines and the professional time expended in the review process. Clerical support is needed in the development of the planning guidelines and in the preparation of planning guidelines for dissemination. Expenses should also be anticipated for the printing of the guidelines for dissemination to potential applicants.	COST
Preparation of the planning guides will require State agency professional staff who are familiar with the substantive content area of the guides to be developed. Depending upon the number of guides and the range of content, the involvement of professional staff in their preparation could be rather expensive. Review of submitted applications will require the collective expertise of a variety of educational professionals including those familiar with research methodology, evaluation design, the needs of special populations and the substantive content areas addressed by the applications.	STAFF
Depending upon the number of priority areas contained under each funding pool, approximately 10 to 15 days of professional effort should be required to prepare a planning guide. Development of the programmatic approval criterion and the program review procedure can be expected to require approximately one professional person-week. Review of an individual program application will require from one and one-half to two hours depending upon the length and complexity of the program application. The total calendar time for conducting this procedure thus varies from two to four months depending upon the level of staff effort assigned and the number of applications to review.	TIME

The only special facilities required are conference rooms for the review teams' meetings and printing and duplicating facilities if this activity is performed within the agency.	EQUIPMENT FACILITIES
Depending on the number of guidelines prepared and the magnitude of the response, a wide variety of agency personnel can be expected to be involved. Staff from other agencies might be involved to the extent that external participation is provided for in the application review process. If external participation is involved, it could well involve representation from special education, vocational rehabilitation, mental health, agencies on the aging, and employment and training councils. Local education agencies and other service providers typically apply for funds in this mode of resource allocation.	PARTICIPANTS
The programmatic mode is especially well-suited for the on-going delivery of programs, services and activities to special needs populations. Specification of priority areas for each funding pool provides a wide latitude of discretion for local applicants. The planning guidelines serve to delineate the general class of programs, services and activities required to satisfy stated objectives without requiring that local applicants respond to specifically stated target programs, services and activities. In this sense, the programmatic mode is more responsive to the exercise of local discretion in the choice of priority areas to be addressed and in the specific programs chosen to satisfy these priority areas.	APPLICATIONS
The programmatic mode, being more general in approach, will generally reflect local perception as to the problems and needs to be addressed by the proposed program. To this extent, there is a risk that proposed programs may address problems and needs that, although related, may not be central to the stated priority areas as determined by the State agency.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

SELECT PROGRAMMATIC ACTIVITIES FOR FUNDING

Those programs, services and activities identified in the fifth component of the Planning process should be assigned to identified funding pools. These funding pools represent categorizations of Federal funds according to various programmatic purposes as defined in Title II, P.L. 94-482. Although funding pools can be described at various levels of specificity, typical funding pools for special populations could be expected to include:

- set-asides for the handicapped, disadvantaged and those of limited English-speaking ability (Sec. 110);
- cooperative vocational education programs through local education agencies in areas having high rates of school dropouts and youth unemployment (Sec. 122);
- residential vocational schools in areas with substantial numbers of youth who dropped out of school or who are unemployed (Sec. 124);
- exemplary and innovative programs (Sec. 132);
- curriculum development (Sec. 133);
- vocational guidance and counseling (Sec. 134);
- program activities designed to overcome sex stereotyping and bias (Sec. 136);

- special programs for the disadvantaged (Subpart 4); and
- consumer and homemaking education (Subpart 5).

Once programmatic activities with congruent intent are assigned to funding pools designed to serve that intent, the programmatic activities should be prioritized within each funding pool. If these programmatic activities have been assigned priority values as provided for in component five of the planning system, then these priority values can be used to prioritize programmatic activities within each funding pool. If priority values have not been previously assigned, programmatic activities assigned to each funding pool should be rank-ordered in terms of their importance for funding.

This prioritization might best be a team effort. Team membership might consist of the handicapped and/or disadvantaged consultant, sex equity coordinator, and the State consultant(s) having responsibility for the programmatic areas included in the intent of the Federal funding pool. These priorities, once established, should be reviewed to ensure that they are consistent with overall agency policy and intent.

Prioritized programmatic activities should be grouped into major priority areas within each funding pool. These priority areas should, to the extent possible, communicate a common underlying programmatic theme. This theme should be specific enough to communicate the overall intent with regard to the nature of programmatic activities desired, yet broad enough to allow eligible recipients discretion in the means proposed to satisfy that priority intent.

STEP 2

DEVELOP PLANNING GUIDELINES FOR EACH FUNDING POOL

Planning guidelines are developed for the purpose of conveying information to eligible recipients for use in the preparation of program applications addressing specific funding pools. Planning guidelines should generally contain the following topical areas:

- Purpose of the programs
- Requirements for program approval
- Qualifications of eligible recipients
- Expenditures eligible for reimbursement
- Applications required

The purpose section of each guideline should delineate the intent of all programs funded under this funding source. This programmatic intent can be communicated by a brief description of Federal and State legislative mandates pertinent to this intent and a description of relevant State board policies. These legislative and policy mandates may be supplemented by additional narrative describing

- the statewide need for targeted programs to serve special populations;
- State and national priorities for serving special populations;
- State initiatives in establishing linkages between agencies serving special population groups; and
- other information that may communicate the need for new and innovative approaches to serving special needs populations.

The requirements section of the guidelines should communicate to the applicants the necessary conditions for program approval. A basic condition is that the program application address one or more of the priority areas associated with the funding pool. In order to communicate the intent of each priority area, a brief narrative describing each of the priority areas should be included in the guidelines. Narratives should include a description of the basic intent of the priority areas and may provide examples of program activities addressing these priority areas. Program applications should be required to demonstrate local need for the program proposed. Depending upon the program proposed by the applicant, local need might be stated in terms of the number of currently enrolled students with special needs to be served by the program and/or an estimate of the universe-of-need existing in the out-of-school population. Applicants should be required to define the procedures used to assess the needs for services to be provided to special

populations and to provide a justification for the use of that methodology. Objectives to be served by the program should be stipulated in measureable terms and a narrative of the programmatic structure and activities used to achieve these objectives provided. The personnel to be assigned to the program and their areas of expertise should be indicated along with a rationale as to how their special expertise will be utilized in the program. Budgetary categories should be provided and applicants required to prepare a budget itemized according to the line-item categories.

Qualifications of eligible recipients should be included in the guidelines. These qualifications would serve to determine what types and levels of educational institutions are eligible to submit applications and hence is equivalent to the assignment of responsibilities to educational levels and institutions as required in P.L. 94-482, [Section 107(b)(2)(III)]. Depending upon the funding pool and the priority areas assigned to that pool, eligibility may be restricted to educational levels, to educational agencies and institutions with approved vocational programs, to local agencies and institutions located in areas of high youth unemployment and/or school dropouts, to urban areas or central cities or a variety of other conditions depending upon the funding pool and the intent of the priority areas.

Expenditures eligible for reimbursement under this funding pool should be enumerated. To the extent consistent with State law and State board policy, personnel expenditures to be reimbursed should be enumerated by functional category rather than by job title. Eligible expenditures may be explicated by a listing of typical examples eligible for reimbursement under specific budgetary categories.

Finally, the planning guidelines should contain a listing of the application forms that need to be filled out in order to obtain project approval. A packet of required application forms should be contained in the planning guidelines along with instructions for their completion.

STEP 3

ESTABLISH CRITERIA FOR APPLICATION REVIEW

The criteria for application review constitute the dimensions of quality and compliance to be used in making a judgment as to the approval status of an application. These

criteria should parallel the topical areas covered in the planning guidelines. Accordingly, applications should be reviewed by determining the extent to which

- priority areas are addressed;
- the problem is identified and the needs documented;
- objectives are sharply defined and oriented to the problem of concern;
- activities are appropriate for the achievement of stated objectives;
- results of activities are identified;
- personnel assignment appears justifiable;
- institution exhibits evidence of commitment to program;
- budget appears reasonable in terms of proposed scope of work;
- applicant meets stated qualifications.

The extent to which an applicant meets these criterion factors can be determined by a series of rating scales. Two basic options exist in the development of rating scales. The first option is to use a global scale developed for each of the topical areas covered in the planning guide. The alternative is to develop for each topical area a number of rather specific scales for rating the extent to which the application meets the criteria for that topical area.

As an example, the objectives may be rated on a single global scale according to the extent to which the objectives of the proposed project are sharply defined, clearly stated, capable of being obtained by the proposed procedure and capable of being measured. Or alternatively, objectives may be separately rated according to: 1) the extent to which they are specifically expressed so as to meet the stated needs, 2) the extent to which the stated objectives meet the needs of the groups affected, and 3) the extent to which the stated objectives are expressed in terms that allow for their measurement. Whereas the global rating statement requires one global judgment, the more specific rating scales require three separate judgments in this instance. The more specifically stated rating scales allow

for a more sharply focused judgment as to the extent to which the applications meet the proposed intent, but at a trade-off of requiring an increased number of judgments.

The question of weighting the criterion factors is handled differentially for the global and specific approaches to application ratings. Using the global approach, the criterion factors can be differentially weighted by assigning a number of points to each criterion factor. For convenience purposes, the total number of points assigned across all criterion factors usually totals to some constant, such as 100. Rating categories assigned to the global rating scales generally vary from four to no more than seven. A four-category global rating scale could be designed using the categories:

- Not addressed
- Inadequately addressed
- Adequately addressed
- Excellently addressed

Depending upon the maximal score value assigned to that criterion factor, a range of points may be assigned to each category. For instance, in the preceding example, the not addressed category might be assigned 0 points, the inadequately addressed category, 1-5 points, the adequately addressed category, 6-10 points, and the excellently addressed, 11-15 points. In this case, 15 points would be the maximum weight assigned to that criterion factor.

Because of the larger number of weighting scales involved, more specific scales are not as conducive to such weighting procedures. An alternative approach is to provide for a fixed number of unweighted scoring categories for each rating statement. Each scoring category could be assigned a number from 1 to the total number of categories, with the higher number indicating a superior rating. In the case of five categories, a rating of 1 would be the lowest rating with a rating of 5 indicating the highest rating. The rating assigned to a particular item would be designated by the category chosen. For example, if the third category were chosen in a five-point rating scale, a value of three would be assigned to the criterion being rated. In both the global and the more specific rating scales, the score assigned to an application would be the sum total of the ratings received across all criteria.

STEP 4**DETERMINE PROJECT REVIEW PROCEDURE**

The review procedure should seek to involve as wide a constituency of rater expertise as possible. Depending upon the content of the planning guides, rater representation might conceivably include those with expertise in research design, curriculum development, counseling and guidance, evaluation, dissemination and the substantive content area(s) addressed by the guides. To the extent that assessment of the quality of the proposals might be enhanced by the application of expertise external to vocational education, representation from external agencies should be sought as appropriate; e.g., special education, vocational rehabilitation, developmental disabilities, and employment and training.

Once the raters have been identified and have agreed to serve, a schedule for reviewing the program applications should be determined. This schedule should allow for an orientation of the raters to the procedures to be used in assessing the quality of the obtained applications.

STEP 5**DISSEMINATE PLANNING GUIDELINES**

Planning guidelines should be disseminated to prospective applicants. Guidelines may be disseminated individually or collectively as a booklet. The advantages of dissemination of separate guidelines for each funding pool is that the dissemination can be better targeted at eligible recipients. However, since the area of discretionary response is generally fairly broad, the State agency may not have sufficient information to determine targeted eligibility and may therefore wish to disseminate on a broader basis. Since less targeted dissemination shifts the burden of eligibility determination onto the applicant, there is increased likelihood that unqualified or marginally qualified applicants will respond.

Since the planning guidelines are meant to be a part of the annual funding cycle, planning guidelines for special populations can be submitted along with the other materials sent to the locals to support their planning and application

effort. It is recommended however, that the planning guidelines for special populations retain their separate identity. By so doing, the unique planning requirements for special populations are emphasized and the necessity that they be given special consideration is reinforced.

STEP 6

REVIEW PROGRAM APPLICATIONS

Program applications received should be logged in by a code number that has been assigned to each planning guideline. All applications received in response to the guideline should be collected after the deadline date and turned over to the chairperson of the appropriate program review committee. The chairperson of the review committee should assign applications for review to individual committee members identified in Step 4. Ideally, all committee members should review all applications assigned to that review committee. Each reviewer should rate all applications without benefit of communication with other members of the review committee. Upon completion of the initial review, the committee should be convened and each application discussed in terms of its rated merits. After a discussion of the merits of each proposal, raters should be provided an opportunity to adjust their ratings so as to reflect any changes in their judgments as a function of the group discussion. If the number of proposals received prohibits review of all program applications by each group member, procedures should be adjusted so that each group member has a manageable number of applications to rate. Care should be exercised to ensure that all applications are rated by at least two members of the review panel.

The review panel should make a collective judgment as to the approval status of each application. Each program application reviewed should be assigned to one of three categories: approved for funding as is, approved for funding with appropriate modifications, disapproved for funding. For those applications that are given conditional approval, the conditions necessary for approval should be noted and the limitations and weaknesses of the present application described. For those applications disapproved for funding, the reasons for disapproval should be well documented with specific instances of weaknesses in the various criterion areas noted. This documentation is especially useful as

supportive evidence in any subsequent adjudication process that might result.

The chairperson of the review panel should be responsible for the preparation of a report indicating the disposition of every program application received and the justification for that disposition. This justification should be based on

- the average total score ratings assigned to that application;
- the average ratings for each of the component criteria used to rate the applications;
- the synthesized judgments as to the strengths and weaknesses of the application; and
- the chairperson's synthesis of the consensus of the panel as to the merit of the application.

Conditional upon the approval of the appropriate decision-makers, notification of the disposition of applications should be sent to each submitting agency or institution. Those agencies or institutions submitting conditional applications should be given the opportunity to submit modified applications. Those agencies that choose to submit a modified application should have their revised application reviewed and a decision made as to its approvability for funding. Thus the final result of this step is a set of program applications approved for funding.

PRIORITIZATION OF LOCAL APPLICATIONS

The second activity in the allocation of resources is the establishment of procedures for the prioritization of local applications for funding. The intent of this activity is to rank order the program applications received for priority consideration for funding. The assumption is that those applications with high priority are to be given greater consideration for funding than those with a lower priority. It should be noted that only approved applications are to be prioritized. This ensures that the prioritization process is driven by applications received from eligible recipients.

Two alternative procedures are presented for accomplishing the prioritization. The first prioritization alternative is for priorities to be established in conjunction with the review process. Priority determination under this alternative is a function of the collective subjective judgments of the raters. An alternative to this procedure is to prioritize the approved applications by the use of an objective prioritization formula. Using this procedure, prioritization criteria are developed and combined into a prioritization formula. The formula is then used to assign priority scores to each project or program application, and projects or applications are ranked according to their priority scores.

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SUBJECTIVE PRIORITIZATION

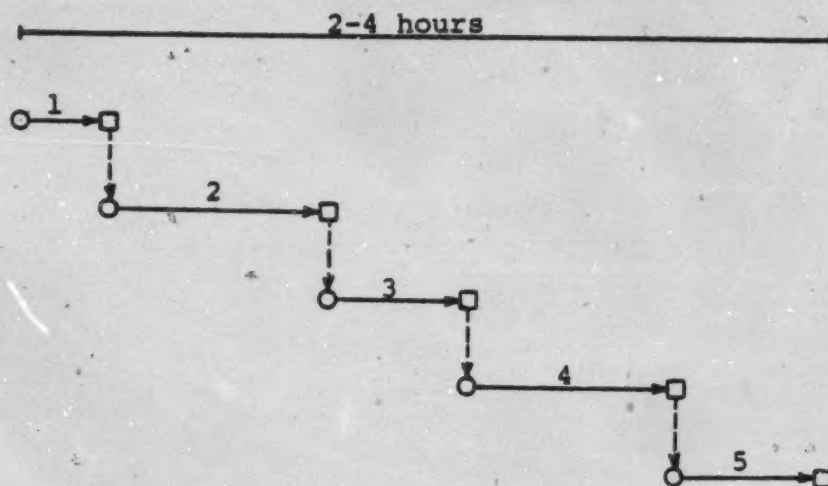
SUBJECTIVE PRIORITIZATION

CONSTRAINT

OUTCOME

ACTIVITY

LEGEND: ○ START POINT



Steps:

1. Provide Information on Approved Eligible Recipients
2. Initial Discussion of Eligible Recipients
3. Prioritize Application
4. Discussion of Prioritized Results
5. Final Prioritization of Applications

OVERVIEW

Subjective prioritization utilizes the review panel established in activity one to prioritize the approved projects or applications. Prioritization under this approach is a natural extension of the review process and provides for smooth transition from review to prioritization. Ratings assigned in the review process supplemented by information on the eligible recipient are used by the raters in making the prioritization decisions. Individual reviewers rate and prioritize the approved applications based upon data provided. Tentative priority assignments are discussed by the review group and a consensus sought as the priority allocations.

KEY CONSIDERATIONS

Costs associated with this procedure are principally in professional personnel used in the prioritization process. The magnitude and the involvement of professional staff depends upon the number of projects or programs reviewed.	COST
Prioritization is performed by a group consisting of five to seven members. It is anticipated that group members would have expertise in research and development, evaluation, needs of special populations, or the substantive content area covered by the intent of the funding pools within which projects or program applications are being prioritized.	STAFF
Since in this procedure prioritization is an extension of the review process, it is anticipated that prioritization could occur with a group meeting lasting from 2 to 4 hours. This would provide sufficient time for individualized ratings of projects or programs and for discussion of the results.	TIME

Facilities required are a conference room large enough to accommodate the group members. A flip chart may be needed to record the results of the ranking process. Additional materials used in the process are 3x5 cards necessary to record individual rankings.	EQUIPMENT FACILITIES
Participants should be drawn from a variety of external agencies as they are required to supplement the expertise of State vocational education agency personnel. These external agencies might include Special Education, Vocational Rehabilitation, Employment and Training, State agencies on Aging, Mental Health, Commission on the Status of Women, Developmental Disabilities and other agencies and organizations whose members have specialized expertise in the needs of special populations.	PARTICIPANTS
This procedure is equally applicable to the prioritization of projects or programs. In either case, the prioritization procedure will assign priority scores to approved project proposals or program applications. This procedure is suitable to use when prioritizing local applications dealing with any of the special populations.	APPLICATIONS
Group discussion in the establishment of priorities serves to raise problems and issues heretofore not considered in the review process. Because priority assignments are based entirely on subjective judgments, the likelihood of rater bias is increased.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

PROVIDE INFORMATION ON APPROVED ELIGIBLE RECIPIENTS

In order to make an informed decision on priority assignments, reviewers must be provided with a variety of information descriptive of the status of the eligible recipient. At a minimum, raters should be provided the following information:

- whether the eligible recipients are located in economically depressed areas;
- whether they are located within areas of high rates of unemployment;
- whether they are able to provide the resources necessary to meet the vocational education needs without Federal assistance; and
- whether the programs are new to the areas being served.

This information should be provided for all approved eligible recipients. Additional information may be provided depending upon the funding pool being utilized. Such information might include youth and/or adult unemployment rates and school dropout rates.

To facilitate utilization of this information, a fact sheet containing the relevant information for each eligible recipient should be provided to the raters. Information provided to the raters should, to the extent possible, be based on data collected and verified by the State agency. In some instances it may be necessary to obtain information directly from eligible recipients. A case in point is the stated reasons why they may need Federal assistance.

STEP 2**INITIAL DISCUSSION OF ELIGIBLE RECIPIENTS**

Prior to the assignment of priorities, a discussion period should be provided. This gives an opportunity for the reviewers to request clarification of any information that they may not understand, to request any other information that they might consider pertinent and to discuss generally the comparative status of eligible recipients.

STEP 3**PRIORITIZE APPLICATIONS**

In determining the priority of the approved applications, review team members independently select 10 to 15 project proposals as applications that they consider to be the most meritorious for funding. Next they rank those proposals or applications selected in order of merit for consideration for funding. The rankings can be accomplished through the use of 3x5 cards. Review members individually select the 10 (or 15) indicating the most meritorious. The applications are then ranked, with 1 indicating the least important and 10 indicating the most important. The cards are collected, and the votes are tallied on a flip chart for group review. An aggregate group priority ranking is calculated by multiplying the number of times the project proposal or application was ranked by the sum of the ranks assigned and ranking the resulting products. An example of this is provided in the table on the following page.

ACHIEVING GROUP PRIORITY RANKINGS OF LOCAL APPLICATIONS

Project (Application) Number	Ranks	Number of Times Ranked	Sum of Ranks	Product of No. of Ranks x Sum	Group Priority
1	4,7,6,3 5,5	6	30	180	3
2	1,2,4	3	7	21	7
3	3,4,8,6 3	5	24	120	4
4	1,1,2	3	6	18	8
5	9,8,8,10 5	5	40	200	2
6	2,4	2	5	12	10
7	5,7,8,7 9,9	6	45	270	1
8	10,1,2	3	13	39	6
9	6,3,5,6	4	20	80	5
10	4,4	2	8	16	9
.					
.					
.					
N	1,1	2	2	4	n

STEP 4**DISCUSSION OF THE PRIORITIZED RESULTS**

Discussion occurs immediately after the recording of results on the flip chart. Discussion is for clarification purposes only and is not intended to be a debate. This discussion can reveal similarities in review members' criteria for ranking and resolve problems due to misunderstanding or mis information.

STEP 5**FINAL PRIORITIZATION OF APPLICATIONS**

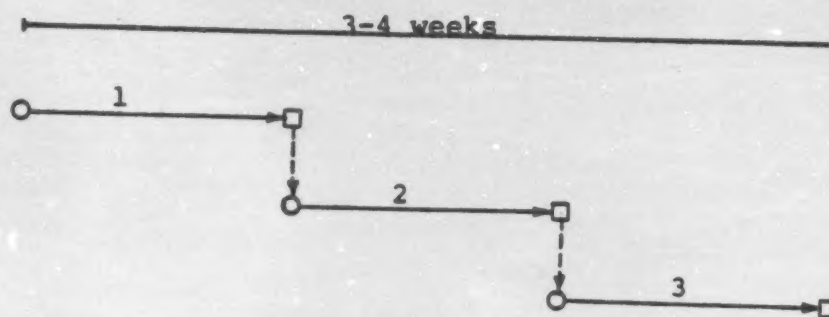
The same procedure as described in Step 3 is again repeated. Replication of the prioritization process gives review members an opportunity to alter their prioritization based upon the discussion of the initial results. In this manner, each team member can take advantage of the discussion, thereby increasing the validity and accuracy of the prioritization process. The result of this step is a prioritization of approved project proposals or program applications.

In the event that no review team member ranks a particular project or program (application) in the top 10 or 15, all projects or programs receiving no ranking by any team member can be assigned the lowest priority score. An alternative to having ties at the lowest score is to take all such projects or program applications and to repeat the prioritization process just on those applications. In this manner, these project or program applications can be prioritized and then appended to the prioritization achieved earlier. By repeating this process, all project or program applications can be assured of being placed in a prioritization hierarchy.

OBJECTIVE PRIORITIZATION

OBJECTIVE PRIORITIZATION

LEGEND: ○ START POINT — ACTIVITY —> OUTCOME □ —> CONSTRAINT



Steps:

1. Develop Prioritization Criteria
2. Combine Criteria into a Prioritization Formula
3. Prioritize Applications

OVERVIEW

This approach utilizes a formula for prioritizing local funding project or program applications on an objective basis. Establishment of a procedure for objective prioritization requires that prioritization criteria be developed. Once developed, these prioritization criteria can be combined through the use of an objective formula and the formula used to assign priority scores to project or program applications. The applications can then be ranked in order of these priority scores, thereby establishing a priority hierarchy of local applications.

KEY CONSIDERATIONS

Major cost considerations are those for State agency staff time spent in the development of the objective prioritization formula. Once developed, the formula can be applied by data clerks to compute the priority assignments for each approved applicant.	COST
Staff assignment to this procedure will require a professional with numerical abilities in the establishment of the prioritization criteria. Basic understanding of arithmetic and algebraic relationships are important in the design of the prioritization formula. A junior staff member with an understanding and familiarity with quantitative data can be used to apply the formula to assign priority scores to approved projects or programmatic applications.	STAFF
It is estimated that the prioritization formula can be developed with the expenditure of two to three person-weeks of an educational professional's time, given appropriate competencies. Allocation of priorities to approved applicants should require no more than one person-week.	TIME

The use of a computer is of marginal help. A moderate number of prioritizations to be assigned can be routinely performed by a data clerk using a desk calculator.	EQUIPMENT FACILITIES
The procedure requires the direct participation of only an educational professional and a data clerk. Approval of the form of the objective function will require input from agency decision-makers.	PARTICIPANTS
The objective prioritization formula can be applied to either program applications or project proposals. Since most of the variables utilized in the prioritization formula are descriptive of the characteristics and status of the eligible applicants, the procedure is essentially independent of whether prioritizers are dealing with program applications or project proposals. The procedure is suitable for use in prioritization of local applications dealing with any special population.	APPLICATIONS
Once the prioritization formula is established, no input other than prioritization factors are allowed to influence the prioritization score. Hereafter the prioritization procedure is mechanistically applied with no further judgment contributing to prioritization decisions. Therefore, the likelihood of rater bias is reduced.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

DEVELOP PRIORITIZATION CRITERIA

The initial step in the development of prioritization criteria is the decision as to which factors should be included in the prioritization formula. In order to be in compliance with P.L. 94-482, at least the following factors descriptive of the characteristics of eligible participants must be considered in the prioritization process:

- located in economically depressed areas;
- located in areas with high rates of unemployment;
- unable to provide the resources necessary to meet vocational education needs without Federal assistance; and
- proposes programs which are new to the area to be served.

Depending upon the funding pool, the following additional variables for inclusion are suggested:

- youth and adult unemployment rates;
- school dropout rates;
- employment requirements;
- per pupil expenditures;
- stated reasons why eligible recipients need Federal assistance; and
- total scores for project or program applications.

Each of the proposed variables need to be converted into a numerical score for the inclusion in the prioritization formula. Location in an economically depressed area can be determined from data provided by the State Employment Security agency. If the eligible applicant approved for funding is in an economically depressed area, a score of one can be used; use

zero otherwise. Youth and adult unemployment rates can be obtained from the State Employment Security agency. School dropout rates can be obtained from the State education information system. Whether the application represents a new program can be determined by reviewing the project or program application. Per-pupil expenditures as an indication of need for Federal assistance and the eligible recipient's district can be ascertained from the State agency educational information system. Stated reasons why the local applicant needs Federal assistance can be obtained by requiring the eligible recipients to provide this information in their applications. Manpower needs can be obtained from the SOICC, if available, or by requiring the eligible recipients to provide this information in their local applications.

STEP 2

COMBINE CRITERIA INTO A PRIORITIZATION FORMULA

Once the necessary data are obtained for each eligible recipient, they can be combined into a prioritization formula. Traditionally an additive formula has been most frequently used to combine criteria variables. Criteria scores for eligible recipients are frequently compared to a benchmark to obtain a comparison. This comparison is frequently defined as a ratio of the eligible recipient's criterion score to the chosen benchmark score. The statewide average on the criterion measure is frequently used as a benchmark. An alternative to using the State average as a benchmark is to select a particular recipient as a standard.

When using a ratio, care must be taken in formulating the ratio so as to ensure that increasing values of the ratio correspond with increasing merit for funding. For example, in the use of unemployment rates, one would wish to formulate the ratio with the eligible recipient's unemployment rate as the numerator and the State unemployment rate as the denominator. In this manner, higher-than-average unemployment rates would show as a value greater than one and would contribute to the need for funding. On the other hand, per pupil expenditures of an eligible recipient in comparison with State average per pupil expenditure should be formulated as a ratio with State average per pupil expenditures as the numerator and the per pupil expenditure of the eligible recipient as the denominator.

In this manner, lower than average per pupil expenditures as an indicator of greater need for Federal assistance would show in the formula as a value in excess of one.

An alternative to the use of ratios is to convert each criterion variable in the prioritization formula into standardized scores. This procedure has the advantage of comparing each eligible recipient according to the number of standard deviations above or below the mean on each criterion variable.

STEP 3

PRIORITIZE APPLICATIONS

All that remains is to assign weights to each of the criterion variables. Weights are important to assure that those variables required to be considered by P.S. 94-482 are given greater weight in the prioritization formula than any other variables.

Once the weights have been determined and the decision made to use either ratios or standardized scores, the formula can be used to assign prioritization scores to each project or programmatic application being considered. These prioritization scores assigned to each application can be used to prioritize the applications within each funding pool.

DISTRIBUTION OF FEDERAL FUNDS

The third phase of the allocation of resources is the distribution of Federal funds to eligible recipients. This distribution is based primarily on the eligible recipients' needs for Federal assistance to provide the needed vocational education programs, services and activities. Accordingly, a distribution formula must be established which will allocate Federal funds on the basis of an objective criterion of need. In order to facilitate local planning, a 'planning mark' is provided to applicants prior to submission of their applications. This planning mark is a targeted amount of Federal funds based on a preliminary estimate of need and is not to be interpreted as an entitlement with the presupposition of rights to this amount of funds regardless of the approval status and prioritization of the submitted application.

Distribution procedures differ according to whether the project mode or the programmatic distribution mode is being used. In the project mode, resources are allocated on a project-by-project basis. A project is generally a rather well-defined set of activities that result in a tangible product within a specified time frame. The implied assumption is that a project has a definite life span and will terminate with the production of a designated product. As such, the project mode is particularly well-suited to the design, development and implementation of educational products resulting from program improvement activities and supportive services. In contrast, the programmatic mode focuses on the conduct of activities over time. Because the emphasis is more on the process rather than the product, the programmatic mode of resource allocation is well-tailored to the initiative of new programs and/or the maintenance of existing programs. Because of the basic differences in these approaches to resource allocation, distribution of Federal funds under each of these allocation modes will be treated as separate procedures.

At the time of the preparation of the E.S.P. Planning System, the U. S. Office of Education was in the process of resolving certain issues concerning funding procedures which would be deemed in compliance with Federal regulations. As a result, the two alternative funding allocation procedures contained within this section have been neither approved nor

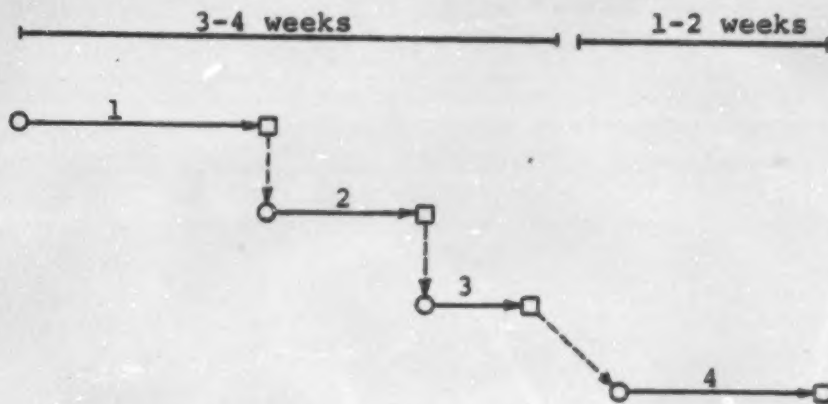
disapproved by the USOE. The procedures represent a synthesis of current practices being used by various States to allocate funds to eligible recipients. They were developed with an awareness of the problems inherent in meeting the needs of special populations, conforming to matching requirements, basing allocation formulas on suspect or less than current data, and still trying to meet the intent of P.S. 94-482 and its accompanying regulations. Therefore, prior to changing its funding allocation procedures, each State is urged to seek the most current USOE guidelines and interpretations regarding those funding procedures which are found to be in compliance with the law.

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**FUND DISTRIBUTION UNDER THE
PROJECT MODE**

FUND DISTRIBUTION UNDER THE PROJECT MODE

LEGEND: ○ START POINT
 — ACTIVITY
 □ OUTCOME
 - - - - - CONSTRAINT



Steps:

1. Establish Criteria for Determination of Need for Federal Assistance
2. Develop Funding Formula
3. Ascertain 'Planning Mark'
4. Allocate Federal Funds

OVERVIEW

Fund distribution under the project mode requires that a procedure be developed for the objective distribution of funds to previously approved projects. Objective allocation of funds requires that the criteria determining the extent of need of eligible recipients be determined and that an allocation formula combining those needs criteria be developed. Planning marks, defined in terms of percentage of local contributions required, should be determined and provided to eligible recipients prior to their submission of project proposals. For each approved project proposal, the amount of approved Federal assistance can be determined and allocated in order of priority.

KEY CONSIDERATIONS

The principal cost component of this procedure is the professional time required to develop the distribution criteria. Depending on the arrangement with the educational information system, additional cost could be incurred for the provision of the secondary data on eligible recipients necessary to establish the 'planning mark.'	COST
This procedure will require the skills of an education professional with expertise in arithmetic and algebraic relationships necessary to develop the objective criterion of need. Input from the State director and other agency decision-makers will be required to provide necessary parameters. Once the planning mark based on objective determination of need has been established, a data clerk can compute the amount of Federal funds to be allocated to each approved project.	STAFF
This procedure will require from three to four weeks for the development of the objective formula for the determination of need. Funding allocations should be able to be calculated within one or two weeks.	TIME

EQUIPMENT FACILITIES	Unless there is an unusually large number of applications to be processed, the use of a computer in the distribution of funds is not necessary. This procedure can most generally be accomplished by a data clerk and a desk calculator.
PARTICIPANTS	No participants other than State agency personnel.
APPLICATIONS	This procedure is applicable to the project mode of allocation of resources. Since the procedure is designed to be used under this mode, its use with the other programmatic mode of resource allocation would be operationally incongruent.
SIDE-EFFECTS	No noticeable side effects are envisioned.

IMPLEMENTATION STEPS

STEP 1

ESTABLISH CRITERIA FOR DETERMINATION OF NEED FOR FEDERAL ASSISTANCE

The criterion factors to be included in the distribution formula should be determined for each funding pool. At a minimum these criterion factors should include as indicators of Local education agency need their relative ability to pay and the number of low income families in their service district. In the case of other eligible recipients, primary consideration should be given to relative financial ability to provide the resources necessary and the relative number or concentration of students whose education requires higher than average costs. Depending on the funding pool and the purposes of the sections or parts of P.L. 94-482 that provide the supportive rationale for the pool, additional criteria of need may be employed.

Criterion factors need to be operationally defined in order to obtain a numerical score. Relative ability to pay can be defined as wealth per capita. Wealth can be measured in terms of assessed property valuations which can be obtained from State tax records for the districts served by the eligible recipients. Per capita has been interpreted to mean per unit of population in the district served. The population estimate for educational districts, however, is not always readily obtainable. In the absence of more appropriate population estimates, 1970 Census data can be used, although the validity of the data is impaired by its age. Improved population estimates may be obtained by using county population estimates as surrogate measures of the population of educational districts. Numerical estimates of the number of low income families can be obtained by using AFDC data and/or data obtained from school lunch program eligibility determinations. Depending on the intent of the programs, services and activities to be funded, the size of the special needs population(s) can be used as a factor in the determination of need for Federal assistance. The size of special needs populations may be determined by estimating the number of students enrolled with special needs

or by determining the number of persons with special needs in the out-of-school population. In most instances, the latter estimates are considerably more difficult to obtain and may not be available to the State agency.

STEP 2

DEVELOP FUNDING FORMULA

Once the criteria for determination of need have been ascertained they will need to be combined into an objective funding formula. Traditionally, an additive formula has been used most frequently to combine criteria variables. Criteria scores for eligible recipients are usually compared to a benchmark to obtain a comparison. This comparison is oftentimes defined as a ratio of the eligible recipient's criterion score to the chosen benchmark score. The State average on the criterion measure is frequently used as a benchmark. An alternative to using the State average as a benchmark is to select a particular eligible recipient as a standard.

When using a ratio, care must be taken in formulating the ratio so as to ensure that increasing values of the ratio correspond with increasing need for Federal assistance. For example, in the use of unemployment rates, one would wish to formulate the ratio with the eligible recipient's unemployment rate as the numerator and the State unemployment rate as the denominator. In this manner, higher than average unemployment rates would show as a value greater than 1.0 and would contribute to the need for funding. On the other hand, per pupil expenditures of an eligible recipient in comparison with State average per pupil expenditure should be formulated as a ratio with State average per pupil expenditure as the numerator and the per pupil expenditure of the eligible recipient as the denominator. In this manner, lower than average per pupil expenditure as an indicator of greater need for Federal assistance would show in the formula as a value in excess of 1.0.

An alternative to the use of ratios is to convert each criterion variable in the determination of need formula into standardized scores. This procedure has the advantage of comparing each eligible recipient according to the number of standard deviations above or below the mean on each criterion variable.

All that remains is to assign weights to each of the criterion variables. Weights are important to assure that those variables required to be considered by P.L. 94-482 are given greater weight in the need determination formula than any other variables.

Once the weights have been determined and the decision made to use either ratios or standardized scores, the formula can be used to assign need scores to each eligible recipient being considered. These need scores assigned to each recipient can be used to rank order the recipients.

STEP 3

ASCERTAIN 'PLANNING MARK'

In order to facilitate local responses to an RFP, a 'planning mark', defined in terms of the percentage of local contributions required, should be determined and submitted to each eligible recipient so as to guide local planning efforts. In order to determine the percentage of local contributions required, it is first necessary to determine the total amount of local match required for each funding pool. This will depend in large part upon the amount (if any) of State matching dollars available for allocation to each funding pool. Once the amount of State matching dollars available is known, the percentage of local match required to comply with Federal requirements can be readily computed.

Using the allocation formula developed in Step 2, eligible recipients for each funding pool--as determined in the review activity--can be ranked according to their relative need for Federal assistance. The ranking of eligible recipients on the basis of need for Federal assistance should be divided into at least three need categories. Those in highest need categories should be required to provide less than the overall percentage of local matching required. Those in the middle category should be required to provide the overall percentage of local matching required, those in the lowest need category should be required to provide more than the overall local matching requirements in order to compensate for those in the higher-than-average need category.

As an example, suppose that the overall percentage of local matching required for a specific funding category was fifty percent. Then those in the higher need category may be

required to match at some lesser amount, say forty percent, and those in the lowest need category may be required to match in a greater amount, say, sixty percent. In this manner the amount of local match required could be made conditional upon the relative need for Federal funds as determined by the objective criterion measure. This procedure may be modified, and could provide for more categories including those eligible recipients with highest needs for which no local match at all would be required.

The local percentage match required of eligible recipients could then serve as planning marks to guide eligible recipients in determining the scope of their proposed response to the RFP. The appropriate planning mark should be submitted to eligible recipients at the same time that the RFP is disseminated since it is an important consideration in the local decision to respond to the RFP.

STEP 4

ALLOCATE FEDERAL FUNDS

As a prerequisite to the actual allocation, it is first necessary to determine an allocation strategy. Two basic allocation strategies can be utilized. One strategy is to allocate Federal funds to each approved project in order of priority until all Federal funds allocated to the funding pool are exhausted. Under this strategy, all approved applicants may not be funded. If it is judged desirable that all approved applications should receive some funding and there are insufficient funds available to meet the planning marks, then the alternative strategy is to fund all projects on a pro-rata basis. Federal funds requested for all approved projects could be reduced by a similar percentage for each approved project. An option to this procedure would be to allocate Federal funds according to a differential pro-rata funding depending upon the need of the eligible recipient for Federal funds. For example, need categories established in Step 3 could serve as the basis for the differential pro-rata reduction. Those eligible recipients with approved projects and having the greatest need for Federal funding could receive the least pro-rata reduction. Conversely, those eligible recipients with approved Federal projects having the least need for Federal assistance could receive the greatest pro-rata reduction in the funds allocated. Of course, overall matching requirements will need to be monitored when making such adjustments in funding allocations.

Depending on the allocation strategy chosen, the amount of approved Federal support should be allocated to each project in order of established priority. The amount of Federal funds allocated to each approved project will depend upon the amount of Federal funds requested in the proposal and position of the proposal in the prioritization of approved proposals. It is important to note that the final distribution of Federal funds to eligible recipients is driven by the project application, with due consideration given to overall matching requirements.

**FUND DISTRIBUTION UNDER THE
PROGRAMMATIC MODE**

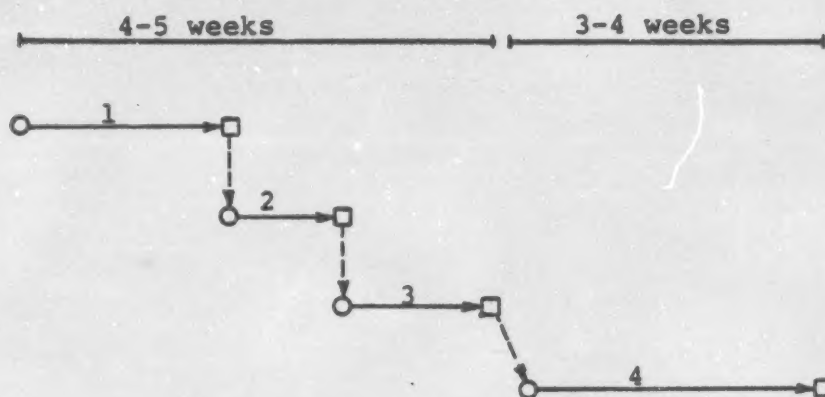
FUND DISTRIBUTION UNDER THE PROGRAMMATIC MODE

CONSTRAINT

OUTCOME

ACTIVITY

START POINT



Steps:

1. Establish Criteria for Determination of Need for Federal Assistance
2. Develop Funding Formula
3. Ascertain 'Planning Mark'
4. Allocate Federal Funds

OVERVIEW

Fund distribution under the programmatic mode requires that a procedure be developed for the objective distribution of funds to approved program applications. Objective allocation of funds requires that the criteria determining the extent of need of eligible recipients be determined and that an allocation formula combining those needs criteria be developed. Planning marks, in terms of an approximation of available Federal funds, should be determined and provided to eligible recipients prior to their submission of the program applications. For each approved application, the amount of Federal assistance can be subsequently determined and allocated in order of priority.

KEY CONSIDERATIONS

Personnel costs are the principal expenditures under this procedure. Depending on the relationship with the agency management information system, cost could be incurred in the provision of data descriptive of the characteristics of eligible recipients including estimates of the universe of need of special populations served by the eligible recipients.	COST
This procedure will require the skills of an educational professional with expertise in arithmetic and algebraic relationships necessary to develop the objective criterion of need. Input from the State director and other agency decision-makers will be required to provide necessary parameters. Once the planning mark (based on objective determination of need) has been established, a data clerk can compute the amount of Federal funds to be allocated to each approved project.	STAFF
This procedure will require from three to four weeks for the development of the objective formula for the determination of need. Recommended allocation of funds should be able to be accomplished in an additional three to four weeks.	TIME

Unless there is an unusually large number of applications to be processed, the use of a computer in the distribution of funds is of marginal value. This procedure can most generally be accomplished by a data clerk and a desk calculator.	EQUIPMENT FACILITIES
Only State agency personnel will need to be involved in this process.	PARTICIPANTS
This procedure is applicable to the program mode of allocation of resources. Since the procedure is designed to be used under this mode, its use with the project mode of resource allocation would be inappropriate.	APPLICATIONS
Eligible recipients should be made aware of the factors influencing the distribution of funds in order to avoid a possible interpretation of inequities due to changes in their funding level.	SIDE-EFFECTS

IMPLEMENTATION STEPS

STEP 1

ESTABLISH CRITERIA FOR DETERMINATION OF NEED FOR FEDERAL ASSISTANCE

The criterion factors to be included in the distribution formula should be determined for each funding pool. At a minimum these criterion factors should include as indicators of Local education agency need their relative ability to pay and the number of low income families in their service district. In the case of other eligible recipients, primary consideration should be given to the relative financial ability to provide the resources necessary and the relative number or concentration of students whose education requires higher than average costs. Depending on the funding pool and the purposes of the sections or parts of P.L. 94-482 that provide the supportive rationale for the pool, additional criteria of need may be employed.

Criterion factors need to be operationally defined in order to obtain a numerical score. Relative ability to pay can be defined as wealth per capita. Wealth can be measured in terms of assessed property valuations which can be obtained from State tax records for the districts served by the eligible recipients. Per capita has been interpreted to mean per unit of population in the district served. The population estimate for educational districts, however, is not always readily obtainable. In the absence of more appropriate population estimates, 1970 Census data can be used although the validity of the data is impaired by its age. Improved population estimates may be obtained by using county population estimates as surrogate measures of the population of educational districts. Numerical estimates of the number of low income families can be obtained by using AFDC data and/or data obtained from school lunch program eligibility determinations. Depending on the intent of the programs, services and activities to be funded, the number of special needs populations can be used as a factor in the determination of need for Federal assistance. The size of the special needs population(s) may be determined by estimating the number of students enrolled with special needs or by determining the number in the out-of-school population

with special needs. In most instances, the latter estimates are considerably more difficult to obtain and may not be available to the State agency.

STEP 2

DEVELOP FUNDING FORMULA

Once the criteria for determination of need have been ascertained, they will need to be combined into an objective funding formula. Traditionally, additive formulas have been used to combine criteria variables into a funding formula. Criteria scores for eligible recipients are frequently compared to a benchmark to obtain a comparison. This comparison is often times defined as a ratio of the eligible recipient's criterion score to the chosen benchmark score. The State average on the criterion measure is usually used as a benchmark. An alternative to using the State average as a benchmark is to select a particular eligible recipient as a standard.

When using a ratio, care must be taken in formulating the ratio so as to ensure that increasing values of the ratio correspond with increasing need for Federal assistance. For example, in the use of unemployment rates, one would wish to formulate the ratio with the eligible recipient's unemployment rate as the numerator and the State unemployment rate as the denominator. In this manner, higher-than-average unemployment rates would show as a value greater than 1.0 and would contribute to the need for funding. On the other hand, per pupil expenditures of an eligible recipient in comparison with State average per pupil expenditure should be formulated as a ratio with State average per pupil expenditures as the numerator and the per pupil expenditure of the eligible recipient as the denominator. In this manner, lower-than-average per pupil expenditures as an indicator of greater need for Federal assistance would show in the formula as a value in excess of 1.0.

An alternative to the use of ratios is to convert each criterion variable in the determination of need formula into standardized (z) scores. This procedure has the advantage of comparing each eligible recipient according to the number of standard deviations above or below the mean on each criterion variable; it thereby serves to equate the criteria on a similar dimension.

All that remains is to assign weights to each of the criterion variables. Weights are important to assure that those variables required to be considered by P.L. 94-482 are given greater weight in the need determination formula than any other variables.

Once the weights have been determined and the decision made to use either ratios or standardized scores, the formula can be used to assign need scores to each eligible recipient. The need scores assigned to each recipient can be used to rank order the recipients.

STEP 3

ASCERTAIN 'PLANNING MARK'

The planning mark is to be interpreted as a target amount of Federal support that will provide a benchmark to applicants in preparation of their programmatic applications. This planning mark is not to be construed as an entitlement committing the State agency to an allocation of Federal funds independently of the programmatic applications submitted. The planning mark is offered as an aid to the eligible recipients in determining the potential resources available for planning for a particular program under a funding pool.

The planning mark is expressed in terms of a dollar allocation of Federal funds to eligible recipients and is determined by a two-step procedure (which parallels that used to distribute Federal funds to the States). The first step involves determination of the distribution ratio for each eligible recipient under a funding pool. This distribution ratio for any eligible recipient is defined as 1.00 less the product of .50 and the quotient obtained by dividing the average needs score obtained in Step 1 for all eligible recipients by the needs score for a particular eligible recipient. In order to limit the range of the allocation ratio, arbitrary minimum and maximum amounts may be placed on this ratio. In any case, the ratio should be constrained within the range zero to 1. Once the distribution ratio for any eligible recipient has been computed, the planning mark assigned to that eligible recipient is computed by first multiplying the distribution ratio for that eligible recipient by the number in the special needs population(s) to be served by that eligible recipient and dividing that product by the sum of the corresponding products for all eligible recipients

under that funding pool. The ratio so computed for each eligible recipient is multiplied by the total Federal funds available under that funding pool to give the planning mark for an eligible recipient. The planning mark formula can be expressed as follows:

$$\text{Distribution Ratio (DR)} = 1.00 - [.50 \times (\frac{\bar{y}}{y})]$$

$$\text{Planning Mark (PM)} = \frac{\text{DR} \times \text{SP}}{\sum_{i=1}^N \text{DR}_i \times \text{SP}_i} \times \$\text{FF}$$

where

y = the needs score of the eligible recipient

$\bar{y}$ = the average (mean) needs score of eligible recipients

SP = the number in the special needs populations to be served by the eligible recipient

\$FF = amount of dollars in funding pool

The nature of the special needs populations to be used in the computation of the planning marks should be determined in accordance with the intent of the priority areas allocated to the funding pool. Information on the universe of need of special populations can be obtained from the needs assessment component of the Planning System.

In the event that the procedure establishes planning marks below a certain desired minimal level, the amount of funds desired to be distributed to those eligible recipients receiving less than the desired minimum can be calculated and the planning marks of all those eligible recipients receiving more than the desired minimum reduced by a pro-rata share. In this manner, the planning marks can be adjusted until all eligible recipients have planning marks of at least a minimum amount.

Once the planning marks have been ascertained, they should be submitted to the recipients either as a part of the planning guide or as an accompaniment to the planning guide.

STEP 4

ALLOCATE FEDERAL FUNDS

As a prerequisite to the actual allocation, it is first necessary to determine an allocation strategy. Two basic allocation strategies can be utilized. One strategy is to allocate Federal funds to each approved program application in order of priority until all Federal funds allocated to the funding pool are exhausted. Under this strategy, all approved applicants may not be funded. If it is judged desirable that all approved applications should receive some funding, and there are insufficient funds available, then the alternative strategy is to fund all applications on a pro-rata basis. Federal funds requested for all approved program applications could be reduced by a similar percentage for each approved application. An option to this procedure would be to allocate Federal funds according to a differential pro-rata funding depending upon the need of the eligible recipient for Federal funds. Need categories established in Step 3 could serve as the basis for the differential pro-rata reduction. Those eligible recipients with approved program applications and having the greatest need for Federal funding could receive the least pro-rata reduction. Conversely, those eligible recipients with approved program applications having the least need for Federal assistance could receive the greatest pro-rata reduction in the funds allocated. As such adjustments are made, overall matching requirements will need to be monitored closely.

Depending on the allocation strategy chosen, the amount of approved Federal support should be allocated to each program application in order of established priority. The amount of Federal funds allocated to each approved application will depend upon the amount of Federal funds requested in the application and the position of the application in the prioritization of approved applications. It is important to note that the final distribution of Federal funds to eligible recipients is driven by the program application.

APPENDIX

VOCATIONAL E.S.P. PLANNING SYSTEM:
SYSTEM SUPPORTIVE MATERIALS

VOCATIONAL E.S.P. PLANNING SYSTEM:
SYSTEM SUPPORTIVE MATERIALS

CONTENTS:

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I. CAPSULE OF THE E.S.P. SYSTEM

OVERVIEW

The E.S.P. Planning System consists of alternative procedures which State vocational education agencies can use to plan for special populations and decision heuristics for selecting a planning procedure most suited to a State's needs, resources and constraints. Structurally, the System is organized into eight chapters. The first chapter is an introduction to the System, tracing the evolution of planning and special populations as National concerns. A rationale for planning for special populations is provided, as well as an introduction to the USOE Management Evaluation Review for Quality in State Planning and its relationship to the System.

The second chapter of the E.S.P. System is the access component. It contains the self-assessment guide and instructions in its use. By completing the self-assessment process, the user is able to identify those aspects of the planning process which require strengthening and is directed to appropriate planning procedures.

The alternative planning procedures are presented in Chapters three through eight of the E.S.P. System, one chapter addressing each of the six MERQ planning components:

- Policy development
- Needs Assessment
- Goal development
- Development of objectives
- Identification of programs, services and activities
- Resource allocation

Each chapter is structured according to a standard format and contains the following:

- A flow chart depicting the impactors and end products of the component, as well as its relationship to other components of the planning process.

- An introduction describing the contents of the chapter.
- One to four sections, which correspond to the key activities involved in the planning component, composed of alternative procedures for accomplishing the key activity.

The sections and procedures within each chapter also follow a standard format. Each section contains an introduction to the procedures presented and a table of contents for that section. Within the various sections, each alternative procedure description is composed of the following elements:

- A PERT (Program Evaluation Review Technique) Chart which illustrates the time and sequence of activities involved in the procedure.
- An Overview presenting a short description of the procedure.
- Key Considerations to be taken into account in deciding whether to implement a procedure. This element reviews cost, staff, time, equipment and facility requirements of the procedure and describes participant characteristics, applications of the procedure and positive and negative side effects.
- Implementation Steps, which presents a step-by-step delineation of how to implement the procedure.
- For Additional Information, providing, where available, further sources of reference for the procedure.
- Sample Modifications, which are provided in those cases where a procedure can be easily adapted to suit different purposes.

A total of 39 alternative procedures, addressing the 16 key activities of the MERQ, is presented in the System. The next section, which is a topical outline of the E.S.P. System, illustrates the variety and range of alternatives offered by the System.

TOPICAL OUTLINE

Chapter One: Introduction

- Background and rationale for planning for special populations
- MERQ in planning as an organizing framework

Chapter Two: Self-Assessment Procedures

- Description of a self-assessment process
- How to locate and select planning procedures
- The self-assessment guide

Chapter Three: Policy Development

Section 1: Policy Formulation

- Centralized Policy Formulation
- Decentralized Policy Formulation
- Mixed Central-Decentralized Policy Formulation

Section 2: Dissemination of Policies

- Targeted Dissemination
- General Dissemination

Chapter Four: Needs Assessment

Section 1: Surveys of Out-of-School Populations' Needs

- General Population Survey
- Targeted Survey of Special Populations

Section 2: Surveys of Current Students' Needs

- Assessment of Current Students' Needs
- Survey of School Personnel

Section 3: Assessing Needs Through Analysis of Existing Data

- Identifying Special Populations Using Existing Data
- Analyzing the Prevalence and Characteristics of Special Populations Using Existing Data

Chapter Five: Goal Development

Section 1: Formulation of Goals

- Delphi Technique
- Structured Group Process
- In-House Brainstorming

Section 2: Review of Preliminary Goals

- Interactive Review Process
- Non-Interactive Review Process

Section 3: Prioritization of Goals

- Edwards' Multi-Attribute Utilities Method
- Weighted Means Prioritization

Section 4: Dissemination of Goals

- Mini-Plan
- Flyer
- Dissemination Through Scheduled Agency Activities

Chapter Six: Development of Objectives

Section 1: Formulation of Objectives

- Delphi Technique
- Structured Group Process
- In-House Brainstorming

Section 2: Review of Preliminary Objectives

- Interactive Review Process
- Non-Interactive Review Process

Section 3: Dissemination of Objectives

- Mini-Plan
- Flyer
- Dissemination Through Scheduled Agency Activities

Chapter Seven: Identification of Programs, Services and Activities

Section 1: Identification of Activities

- Survey Techniques
- Delphi Technique
- Literature Search
- Nominal Group Technique

Chapter Eight: Resource Allocation

Section 1: Review of Local Applications for Funding

- Application Review under the Project Mode
- Application Review under the Programmatic Mode

Section 2: Prioritization of Local Applications

- Subjective Prioritization
- Objective Prioritization

Section 3: Distribution of Federal Funds

- Fund Distribution under the Project Mode
- Fund Distribution under the Programmatic Mode

FLOW CHARTS OF E.S.P. SYSTEM

COMPONENTS AND ELEMENTS

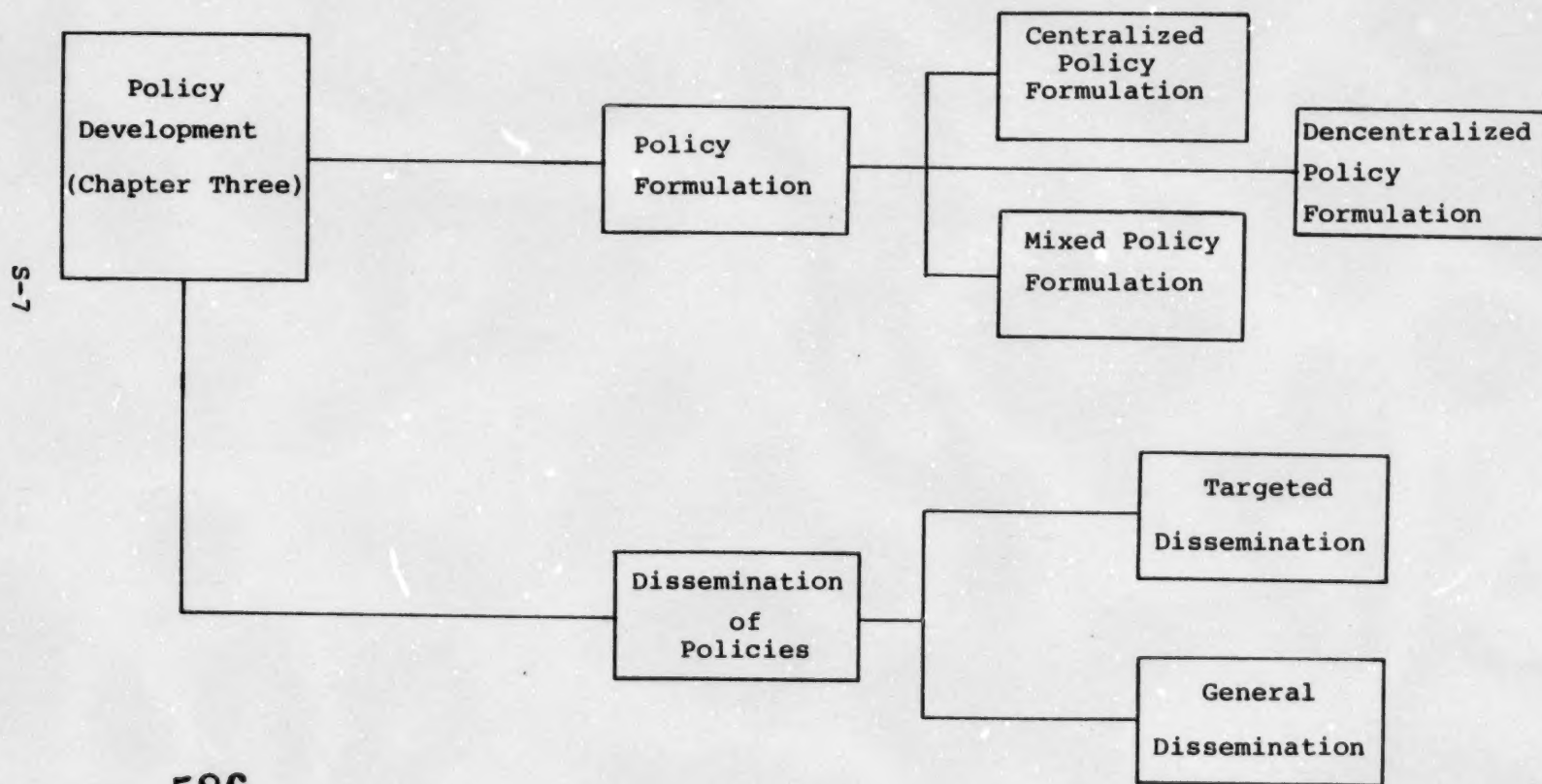
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S-6

**MERQ
Component**

**Key
Activities**

**Alternative
Procedures**



**MERQ
Component**

**Key
Activities**

**Alternative
Procedures**

Needs
Assessment
(Chapter Four)

Surveys of
Out-of-School
Populations'
Needs

General
Population
Survey

Targeted
Survey of
Special
Populations

Surveys of
Current
Students'
Needs

Assessment
of Current
Student's
Needs

Survey of
School
Personnel

Assessing
Needs Through
Analysis of
Existing Data

Identifying
Spec. Pops.
Using Exist-
ing Data

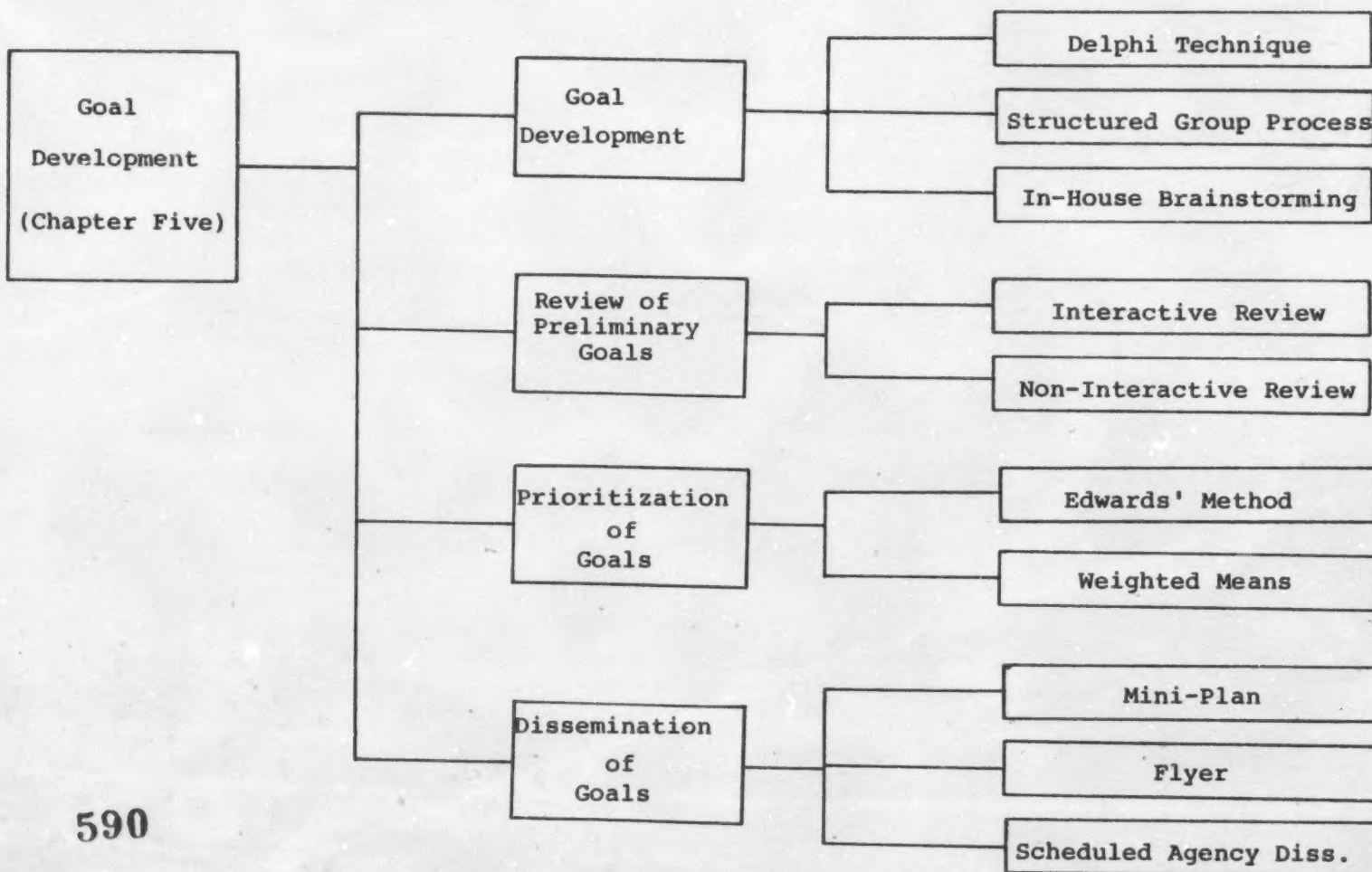
Analyzing
the Preva-
lence Using
Existing Data

8-5

**MERQ
Component**

**Key
Activities**

**Alternative
Procedures**

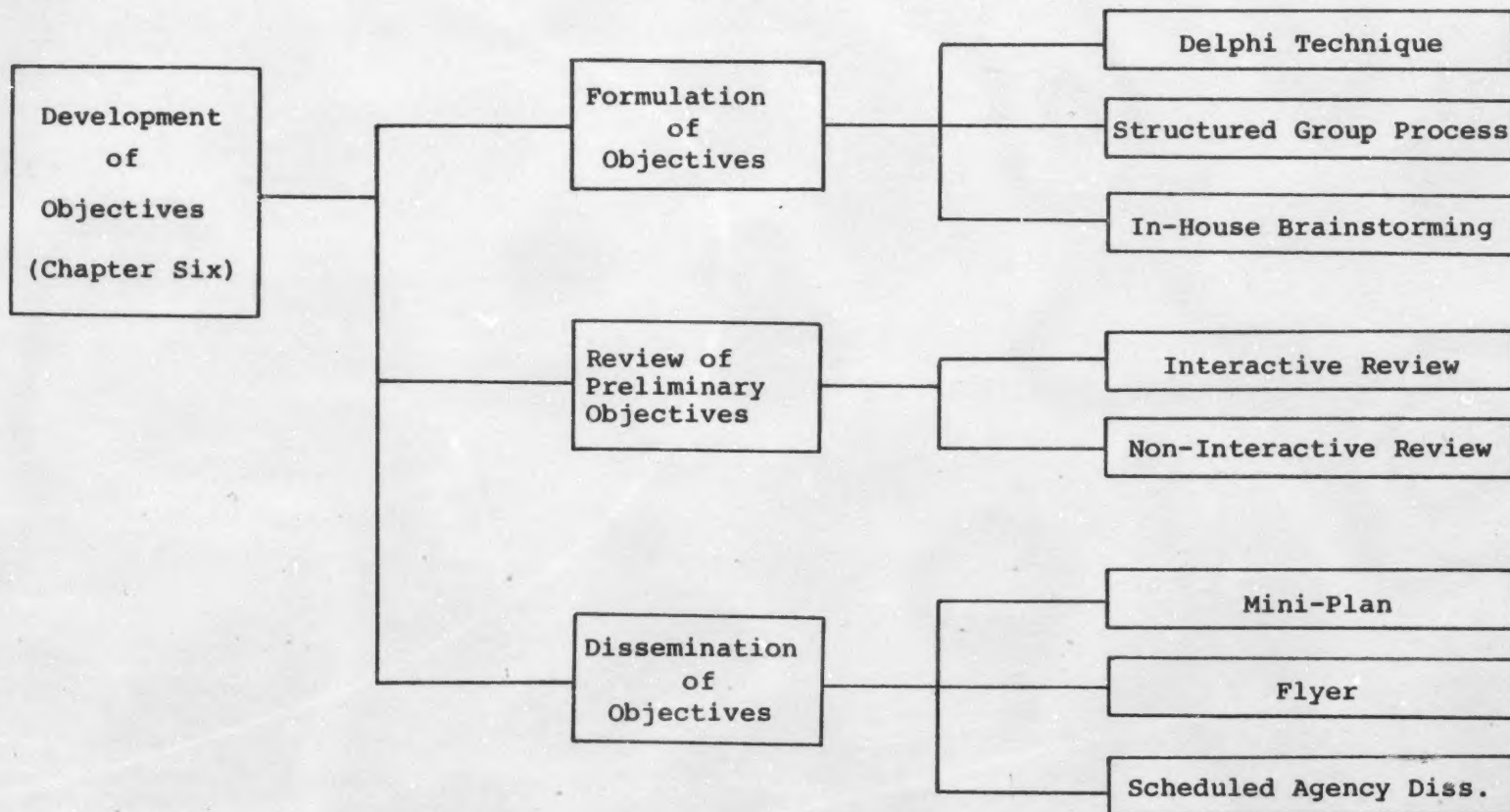


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**MERQ
Component**

**Key
Activities**

**Alternative
Procedures**



S-10

**MERQ
Component**

**Key
Activities**

**Alternative
Procedures**

Identification of
Programs, Services
And Activities

(Chapter Seven)

Identification
of
Activities

Survey
Techniques

Delphi
Technique

Literature
Search

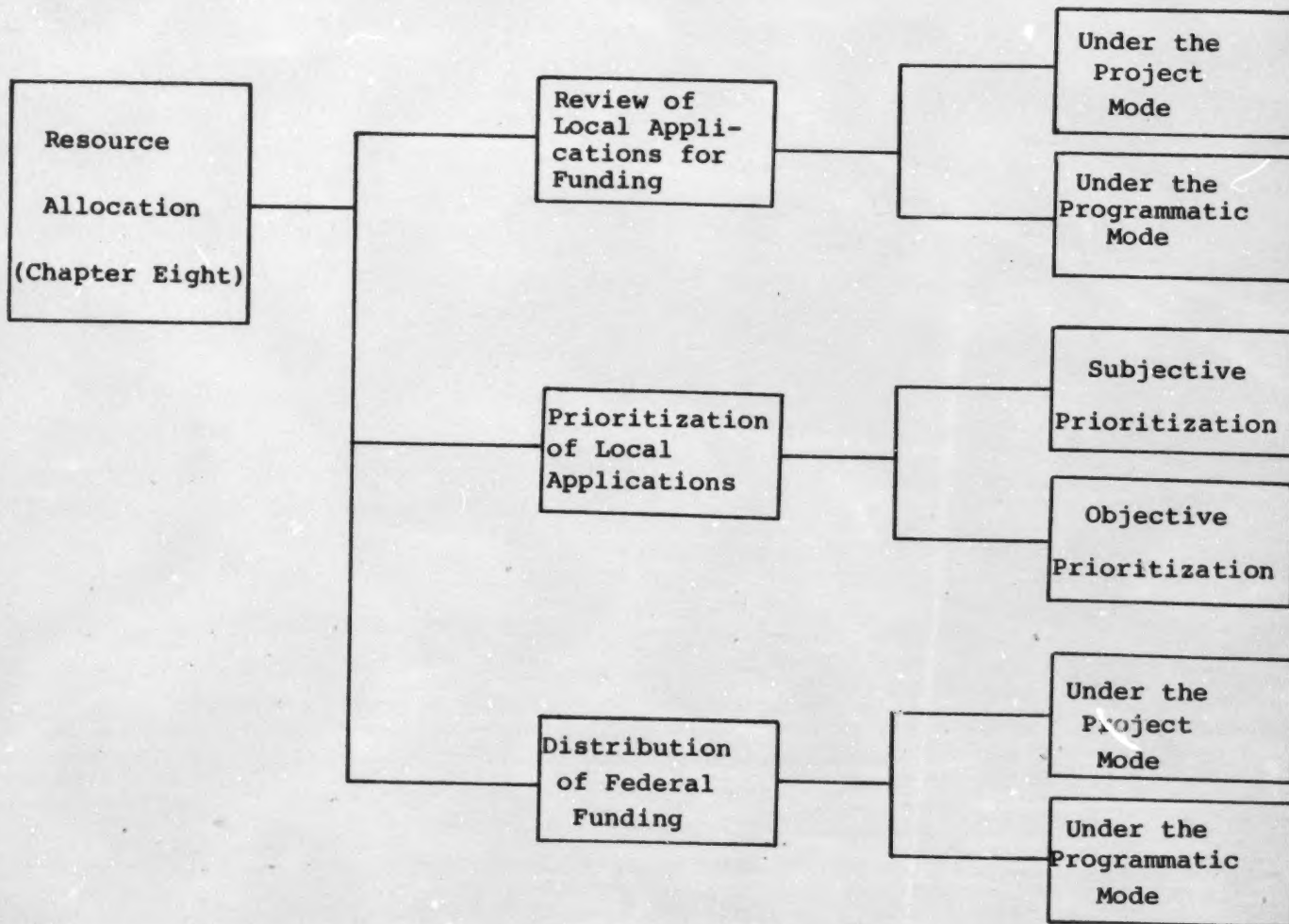
Nominal
Group
Technique

S-11

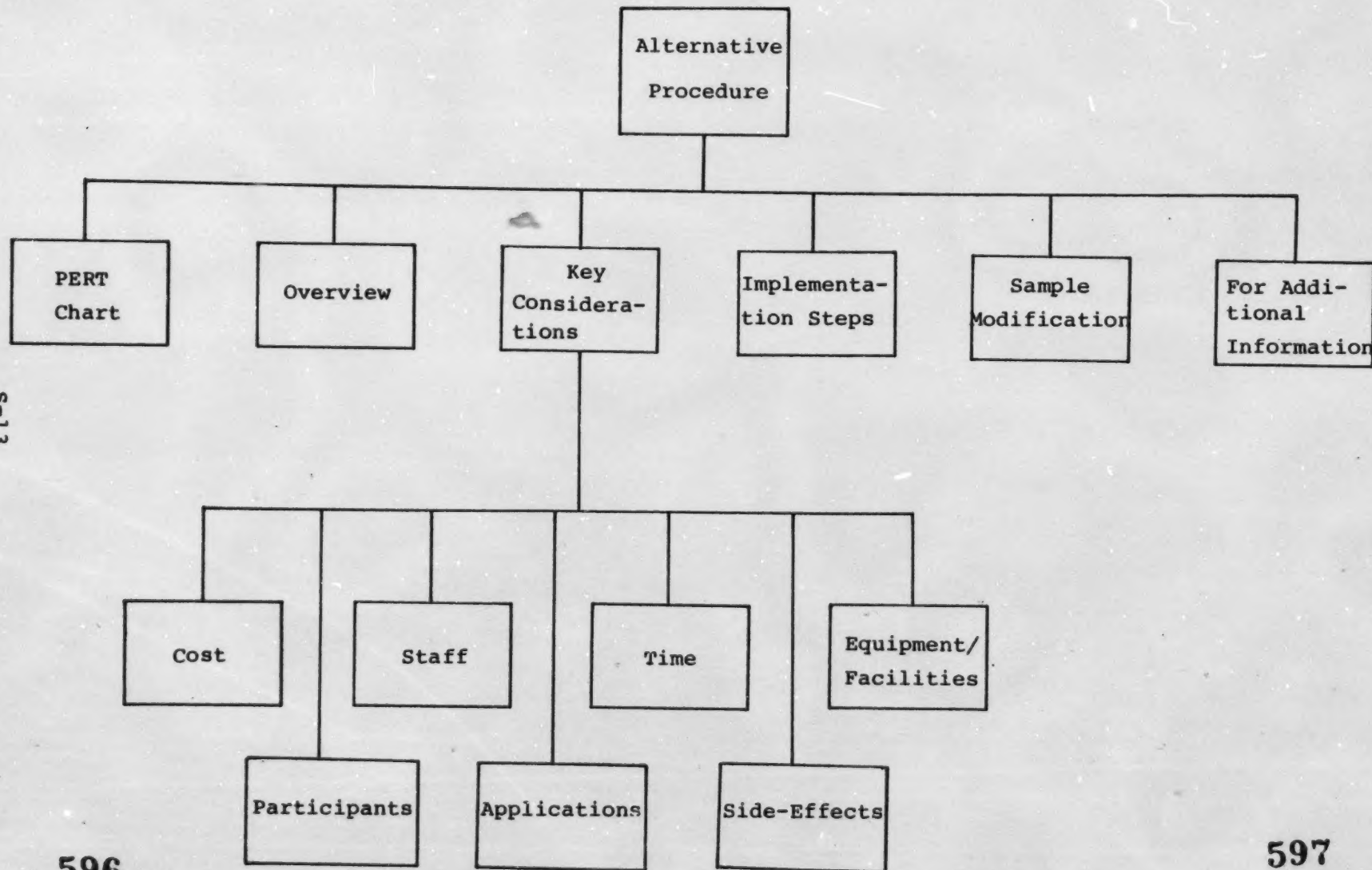
**MERQ
Component**

**Key
Activities**

**Alternative
Procedures**



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S-13

II. USING THE SYSTEM

STEP 1 COMPLETE THE SELF-ASSESSMENT GUIDE

- Identify agency personnel to participate in this activity who are most knowledgeable of the planning process.
- Identified participants individually review each item in the self-assessment guide.
 - Note your perceptions as to the current status of state-level planning with respect to each item.
 - Do not assign ratings at this time.
- As a group, discuss your individual comments and perceptions.
- As a group, assign a single rating to each item in the self assessment based on a consensus of individual perceptions and consideration of the characteristics of the product and process:
 - 2= accurately describes (there is no need for improvement in this area of planning)
 - 1= partially describes (there some need for improvement)
 - 0= non-descriptive (this indicates a definite need for improvement)
- Prioritize those areas of planning in greatest need of improvement.

STEP 2 SELECT AN ALTERNATIVE PLANNING PROCEDURE

- Locate the set of alternative procedures for the highest priority item identified above. (Chapter and page references follow each item).
- Review the PERT chart, overview, key considerations, and implementation steps for each procedure.
- Select the procedure most suited for your needs.

STEP 3

IMPLEMENT THE PROCEDURE

- Review the references in "for additional information" (where available).
- Make any necessary modifications.
- Proceed through the implementation steps.

III. GLOSSARY OF TERMS

alternative procedure: For each item (see key activity) in the self-assessment guide, there are two to four corresponding planning procedures. These were designed to fulfill the intent of quality planning for each item in the self-assessment.

characteristics of the process: This is the classification for one type of criteria from the Management Evaluation Review for Quality in Planning. These criteria represent quality aspects of the key activities of the planning process (e.g., who to involve in the process).

characteristics of the product: This is the classification for one type of criteria from the Management Evaluation Review for Quality in Planning. These criteria describe important structural features of the products of the planning process (e.g., the goals, policies, objectives, etc.).

development of objectives: This is the fourth component of the planning model utilized in the Management Evaluation Review for Quality in Planning. The formulation of objectives is the process through which statements quantifying the outcomes that should be achieved in order to remedy discrepancies between existing and desired conditions are developed. These statements are stated in measurable performance terms and contain a time frame for attainment.

goal development: This is the third component of the planning model utilized in the Management Evaluation Review for Quality in Planning. Goal formulation is the process through which the results of a needs assessment are converted into targetable statements. These statements provide direction for subsequent planning activities in order to close the gap between "what is" and "what ought to be" concerning the delivery of services to special populations.

identification of programs, services and activities: This is the fifth component of the planning model utilized in the Management Evaluation Review for Quality in Planning. At this stage in the planning process, focus shifts from desired outcomes (i.e., goals and objectives) to processes for achieving those outcomes; in other words, from what is to be accomplished to how it is to be accomplished. Programs, services and activities represent the strategies which are intended to facilitate the attainment of objectives targeted at special populations.

key activity: Each of the six major planning components has one or more sub-components which describe those processes or activities necessary for full implementation of the component. The sub-components represent the activities which are considered to be fundamental in the planning process as described in the MERQ guide for BOAE evaluation of State-level planning.

key consideration: Key considerations are those factors which should be taken into account in deciding whether to implement an alternative procedure. These include cost, staff, time, facility and equipment requirements as well as participant qualifications, other applications of the procedure and possible positive and negative side effects. Each of the procedural descriptions addresses these factors as they pertain to procedure implementation.

Management Evaluation Review for Quality (MERQ) in Planning: This refers to the assessment criteria utilized by the U.S. Office of Education, Bureau of Occupational and Adult Education in its evaluation of the quality aspects State-level planning of vocational education. The MERQ is structured according to the conceptualization of the planning process in the 1976 Vocational Education Amendments [PL94-482] sec, 112 (a) (2). The evaluative criteria used in the MERQ are categorized into six topical areas: policy development; needs assessment; goal development; development of objectives; identification of programs, services and activities; and allocation of resources.

needs assessment: This is the fourth component of the planning model utilized in the Management Evaluation Review for Quality in Planning. This component serves to identify the aggregate needs of one or more special populations as they relate to vocational education. Its purpose is to guide subsequent planning activities, i.e., goal and objective development, identification of programs, services and activities, and the allocation of resources.

PERT (Program Evaluation Review Technique) Chart: This is a graphic representation of the time and sequence of activities involved in a planning procedure. It indicates the outcomes of and constraints to each procedural step. A PERT chart is included in the E.S.P. Planning System for every alternative procedure in order to aid in the selection of the most suitable procedure.

policy development: This is the first component of the planning model utilized in the Management Evaluation Review for Quality in Planning. This component focuses on the formulation, adoption and dissemination of State-level policies for vocational education of special populations. As defined in the context of the E.S.P. Planning System, policies are formal statements of intent promulgated by a State Board of Education for the purpose of directing State and Local education agencies in providing vocational education and related services.

resource allocation: This is the sixth and final component of the planning model utilized in the Management Evaluation Review for Quality in Planning. Funds are committed to support the programs, services and activities which will have the greatest impact upon improving the delivery of services to special populations.

self-assessment guide: This is a tool for State education agencies to use in reviewing State-level planning for special populations. It is structured around the six components of the MERQ planning process. MERQ criteria, which have been revised to reflect planning for special populations, are classified into three categories: (1) key activities; (2) characteristics of the process; and (3) characteristics of the product. The guide represents the access component of the E.S.P. Planning System and is linked into the procedural component by chapter and page references following each key activity.